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ABSTRACT

This study is intended to assess the changing lifestyles, values, and preferences of American youth on a continuing basis. Each year since 1975, about 17,000 seniors have participated in the survey, which is conducted in about 130 high schools nationwide. In addition, subsamples of seniors from previously participating classes receive follow-up questionnaires by mail each year. This analysis examines how work intensity (hours worked per week) is linked to indicators of psychosocial functioning and adjustment in a nationally representative sample of high school seniors from the classes of 1985-1989. Consistent with previous research, bivariate correlations were positive between work intensity and problem behaviors. However, once background and educational success indicators were controlled, theses associations were diminished. The results indicate that work intensity does contribute directly and negatively to getting sufficient sleep, eating breakfast, exercising, and having a satisfactory amount of leisure time. These findings, together with the positive association between work intensity and frequency of dating, suggest that adolescents working long hours are adopting a "harried young adult" lifestyle. It briefly discusses conceptual and policy implications, including the likelihood that long hours of part-time work are as much a symptom as a cause of psychosocial difficulties. (Contains 33 references, 3 appendixes, 29 tables, and 33 figures.) (JDM)

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PART-TIME WORK BY HIGH SCHOOL SENIORS: SORTING OUT CORRELATES AND POSSIBLE CONSEQUENCES

Monitoring the Future Occasional Paper 32

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Revised 1992

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An earlier paper in this series (Bachman, Bare, and Frankie, 1986) examined many correlates of employment among high school seniors, based on Monitoring the Future samples of high school seniors in the classes of 1980-1984. In this paper we explore the same basic issues that prompted the earlier paper, and many of the findings overlap. In this paper, however, we have employed more complex multivariate analysis methods, including LISREL modelling, in order to press further some of the issues of causal sequence which were raised earlier. Thus this paper not only builds upon the earlier one, but also in many respects supersedes it. With that in mind, we have felt free to borrow liberally from the earlier work. Accordingly, we take this occasion to state our acknowledgement and appreciation of the work of Dawn Bare and Eric Frankie, who as coauthors of the earlier paper have contributed indirectly but very importantly to the present paper.

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ABSTRACT

This study examined how work intensity (hours worked per week) was linked to indicators of psychosocial functioning and adjustment in nationally representative samples of high school seniors, totalling over 70,000, from the classes of 1985-1989. Consistent with previous research, bivariate correlations were positive between work intensity and problem behaviors; however, these associations were diminished once background and educational success indicators were controlled, thus suggesting that selection factors contribute to the correlations. The results indicate that work intensity does contribute directly and negatively to getting sufficient sleep, eating breakfast, exercising, and having a satisfactory amount of leisure time. These findings, coupled with a positive association between work intensity and frequency of dating, suggest that adolescents working long hours are adopting a "harried young adult" lifestyle. Conceptual and policy implications are briefly discussed, including the likelihood that long hours of part-time work are as much a symptom as a cause of psychosocial difficulties.

INTRODUCTION

The centrality of work in modern society is obvious. How adults define themselves, and how others view them, depend considerably on their work status and occupation. As Wilensky (1964) suggests, "work ... remains a necessary condition for drawing the individual into the mainstream of social life" (p. 134). Among adults, job loss may contribute to decrements in emotional and physical health (e.g., Kessler, House, & Turner, 1987), and likewise, stable reemployment (after job loss) contributes to increased emotional well-being (Kessler, Turner, & House, 1989). In short, at many levels in our society, working is deemed as "good." However, when the individuals in question are adolescents, the issue is less clear.

Several benefits have been attributed to the part-time employment of adolescents. In particular, it has been argued for many years that one way of easing the transition from school to work, and also of dealing with the limitations of formal schooling (e.g., overlong protection from the "real world", narrow age segregation, lack of contact with adults), is to involve young people in meaningful work experiences while they are still in high school. For the adolescent, caught between childhood and adulthood roles, a job can move him or her a few steps closer to adulthood. With a job, the adolescent can demonstrate responsibility, achieve some autonomy, and gain "real world" experience. In some cases, the adolescent may be able to gain some work experience that is directly relevant to his or her future career. Of course, the working adolescent typically earns money, most of which is used for current needs and activities, but some of which may be used for future education or training (cf. Bachman, 1983). At the societal level, adolescent part-time work provides a method of transferring work attitudes and competencies to tomorrow's adult workers. And, of course, it also provides a source of relatively cheap, unskilled labor.

Until about 10 or 15 years ago, there was little concern with the possible negative impacts of adolescent part-time work. Indeed, many of the assumptions cited above about the positive aspects of working appear to have served as a foundation for government legislation aimed at improving the future employment prospects of disadvantaged youth during the 1960s and 1970s (e.g., the 1964 Economic Opportunity Act, the Comprehensive Employment and Training Act of 1973). Likewise, the 1970s witnessed a strong push toward a generalized integration of school and work. Various government panels (e.g., President's Science Advisory Committee, Panel on Youth, 1974; Work-Education Consortium, 1978; National Commission on Youth, 1980) stressed the virtues of work for young people and recommended that efforts be made to combine education and work experiences. For example, the National Commission on Youth (1980) suggested that part-time work could be the "single most important factor" in the socialization of youth to adulthood, fostering such attributes of maturity as independence and responsibility, realistic career decisions, and good work attitudes and habits. Unfortunately, these panels relied little on empirical evidence (cf. Hamilton & Crouter, 1980). Nevertheless, it appears that the prescription that young people take on part-time work during their high school years has been followed widely for more than a decade now; the majority of high school students are working part-time during the school year, and many put in long hours on the job.

In recent years, there has been considerable concern with the possible "costs" of part-time work during adolescence. A debate has developed about whether the types of jobs that are typical among high school students really fit the original prescription, and whether these typical experiences are more positive than negative in their consequences for teenagers. Greenberger and Steinberg and their colleagues have suggested that what adolescents do and what they learn in the workplace may not always be beneficial to their psychosocial health and development, and that working long hours takes away from other experiences that are important for the adolescent and his or her family (e.g., Greenberger & Steinberg, 1986; Greenberger, Steinberg, & Vaux, 1981; Steinberg & Dornbusch, 1991; Steinberg, Greenberger, Garduque, Ruggerio, & Vaux, 1982). Indeed, there is clear evidence that "problem behaviors" (e.g., drug and alcohol use, delinquency) are positively related to hours worked among high school students (e.g., Bachman, Bare, & Frankie, 1986; Greenberger et al., 1981; Mortimer, Finch, Shanahan, & Ryu, 1990a; Steinberg et al., 1982; Steinberg & Dornbusch, 1991). Also, there is evidence to suggest that long hours on the job may be linked with poor school performance (e.g., Bachman et al., 1986; Charner & Fraser, 1987; Mortimer & Finch, 1986; Steinberg et al., 1982; Steinberg & Dornbusch, 1991; Yasuda, 1990), less than satisfying relationships with peers and parents (Greenberger et al., 1981; Steinberg & Dornbusch, 1991; Steinberg et al. 1982; but see Mortimer & Shanahan, 1990), and cynical attitudes regarding business ethics (e.g., Steinberg et al., 1982).

Nevertheless, as Mortimer and her colleagues have indicated, much of the relevant research has focused on the possible negative outcomes of part-time work, while failing to consider the possible positive outcomes (e.g., Yamoor & Mortimer, 1990; Mortimer et al, 1990a). There is evidence indicating that there are indeed some possible benefits of part-time work, including personal responsibility and orientation toward the future (e.g., Steinberg et al., 1982; Stevens, Puchtell, Ryu, & Mortimer, 1991). In addition, there is general agreement among the researchers that the causal direction between part-time work and the positive and negative correlates has not been fully addressed (e.g., Bachman et al., 1986; Steinberg & Dornbusch, 1991; Mortimer et al., 1990a), leaving open the possibility that part-time work has little unique impact on any of the established positive or negative correlates.

In the present investigation, our primary concern is with the possible costs and benefits of part-time work among the nation's high school seniors. In an attempt to provide a more complete picture of how part-time work fits within students' lives, we focused our attention on three broad psychosocial domains, including: a) problem behaviors (e.g., drug and alcohol use, aggression, and victimization); b) time use (e.g., time spent on sleep and exercise, evenings out); and c) subjective experiences (e.g., satisfaction, self-esteem). In addition, based on the evidence concerning gender differences on the experiences and effects of part-time work (e.g., Mortimer, Finch, Owens, & Shanahan, 1990b; Steinberg et al., 1982; Yamoor & Mortimer, 1990), we examined the correlates of part-time work separately for males and females.

The analysis reported here used large nationally representative samples of high school seniors from the classes of 1985-1989 in order to address three interconnected questions. These questions bear directly on issues which have been discussed extensively in the literature. Of

course, the questions are also of practical importance to adolescents, parents, teachers, school officials, employers, and others concerned with the development of the nation's youth.

1. How is Part-Time Work Related to Other Important Outcomes of Young People? At the most descriptive level, our analysis asks what are the bivariate relationships between hours of part-time work, or "work-intensity," and a variety of important "outcome" measures. We ask more than whether there are positive or negative correlations between hours of work and these outcomes; rather, we look at different amounts of work in order to explore the shape of the relationship. The practical question underlying this phase of analysis can be phrased as "How much part-time work is too much?" Indeed, this was the initial question that motivated us to undertake the present investigation, and it reflects several statements in the literature indicating that the negative effects of part-time work are particularly strong for those working more than 15 to 20 hours per week.

An auxiliary question is whether working zero hours is best treated as a simple end point to the continuum of hours worked. If virtually all high school students have the opportunity to work, then this might be appropriate. However, if some (perhaps many) of the non-workers would prefer employment, and if the lack of employment opportunities correlates with other disadvantages, then it may be that many of the non-workers are qualitatively different from their classmates; if so, then non-work should not be treated as merely the zero end of the hours-of-work continuum. Here again, the exploration of relationships which are not strictly linear is an important facet of the present analyses.

2. Do Relationships with Hours of Work Indicate a Causal Impact? For each bivariate relationship between hours of work and some "outcome" dimension, the fundamental question remains as to how it should be interpreted: Does the relationship reflect causal impacts of part-time work, or does it result primarily from the operation of earlier and more fundamental "third variables"? This, of course, is a major issue in the part-time work debate, and addressing this issue necessitates the inclusion of appropriate statistical and methodological controls over potential "third variables". Accordingly, a central feature of the present analysis is to control aspects of background and educational success which could be responsible for the bivariate relationships. For those analyses relating part-time work to drug use, we also introduce some controls for prior drug use (based on retrospective accounts of when various drugs were first used).

3. To What Extent Are Earnings a Key Factor in any Effects of Students' Work? A final question examined in this analysis involves the role of income in any relationship between hours of work and selected outcome variables. Although the prescription of part-time employment as a valuable experience for high school students is based on the expectation of other sorts of benefits, we suspect that in fact most students work primarily "for the money" (Bachman, 1983). Much of the relevant literature has failed to consider the role of earnings in the relationship between hours worked and various psychosocial outcomes. For the adolescent, earnings can represent power and independence (e.g., Weinstein, 1975). Earnings can also represent aspects of the job that are not reflected in work intensity, such as job status or length

of employment. Of course, money may also facilitate engagement in many of the problem behaviors that have been attributed to long hours, particularly drug use. Thus it seems important to check whether any apparent effects of work -- either positive or negative -- may best be characterized as indirect effects via earnings.

METHODS

Data for Analysis

The Monitoring the Future project is an ongoing study of high school seniors conducted by the Institute for Social Research, with primary sponsorship by the National Institute on Drug Abuse. The study design has been described extensively elsewhere (Bachman and Johnston, 1978; Bachman, Johnston, and O'Malley, 1987; Johnston, O'Malley, and Bachman, 1989). Briefly, it involves nationally representative surveys of each high school senior class beginning in 1975, plus follow-up surveys mailed each year to a subset of each senior class sample. The senior year data from the classes of 1985-1989 are used in the present analyses.

Samples and Procedures. A three-stage probability sample (Kish, 1965) is used each year to select approximately 135 public and private high schools representative of the 48 coterminous states. In the spring machine-scannable questionnaires are administered during school hours, usually in a regularly scheduled class period, by professional interviewers from the Institute for Social Research. Special procedures are employed to ensure confidentiality: these procedures are explained carefully in the questionnaire instructions and reviewed orally by the interviewers when they administer the questionnaires. Student response rates were 83% to 84% for each of the survey years included in this report.

Five different questionnaire forms were used each year, each administered to a random one-fifth of the sample (except that a sixth form was added in 1989). Key items concerning part-time work, as well as demographic measures and self-reports of drug use, appear on all forms. Some other items of interest appear on only one form, and analyses involving such items are based on only about one-fifth of the total sample.

Because there are some gender differences in hours worked, in pay, in other key measures such as grade-point averages, and especially in many of the drug use measures, we opted to conduct all analyses separately for males and females (see also Mortimer et al., 1990a, 1990b; Steinberg et al., 1982). The numbers of cases providing employment data are 34,575 males and 37,288 females. Numbers of cases for specific analyses were somewhat smaller due to missing data on other variables. Also, as noted above, some analyses restricted to a single form involve only about one fifth of those numbers. Also, for reasons discussed later, the causal modelling using LISREL is carried out using only white students who were working for pay.

Measures. All measures used in this analyses are presented in Appendix A. Since they are also presented clearly in the relevant tables, there is no need to review them here. The single most important measure for these analyses is based on responses to the question, "On the average over the school year, how many hours per week do you work in a paid or unpaid job?" Response categories include "None, 5 or less hours, 6-10, 11-15, 16-20, 21-25, 26-30, More than 30 hours." The fact that some of the jobs were unpaid complicated some preliminary analyses, and blurred potentially important distinctions. Accordingly, any respondent who reported working but indicated zero earnings was placed in the separate category, "Working but not for pay" (additional information on this group is provided in Appendix B). The result is a nine-category variable distinguishing those who were not working at all, those not working for pay, and those working various numbers of hours (six five-hour increments, plus those working more than 30 hours). The distribution of respondents across these categories is shown in the table below.

Working Status and Number of Hours Worked Per Week by Gender

	Males		Females	
	N	Percent	N	Percent
Work Status:				
Not Working	6,487	18.8%	7,680	20.6%
Working for Pay	25,898	74.9	27,120	72.7
Working, Not for Pay	2,190	6.3	2,488	6.7
Total	*34,575*	*100.0%*	*37,288*	*100.0%*
Hours Worked per Week[a]:				
5 or less	2,347	9.1%	2,348	8.7%
6-10	2,801	10.8	3,186	11.7
11-15	3,321	12.8	4,458	16.4
16-20	5,390	20.8	6,721	24.8
21-25	4,747	18.3	4,994	18.4
26-30	3,365	13.0	2,903	10.7
31 or more	3,927	15.2	2,510	9.3
Total	*25,898*	*100.0%*	*27,120*	*100.0%*

[a]Including only those working for pay

Analysis Strategy

The several objectives of this paper led us to use two different forms of multivariate analysis. We first report a series of multiple classification analyses (a form of dummy variable multiple regression analysis), then we turn to causal modelling to deal with remaining questions.

We recognize that in both phases of the analysis we make assumptions about causal ordering, some of which are open to other interpretations. We are relatively comfortable treating race, parental education, region, and urbanicity as causally prior to senior year part-time work; however, it is more difficult to argue that curriculum, high school grades, and college plans are entirely causally prior to part-time work. The question about grades uses the wording "...your average grade so far in high school," and thus should cover a longer period than the question about hours on a job "...on average over the school year." Assignment to the college prep, vocational-technical, or general curriculum also usually occurs several years prior to the senior year. And although college plans are subject to change, most students form such plans prior to the senior year and hold to them fairly consistently. We are thus comfortable in asserting that the dominant direction of causation is that educational experiences influence choices about hours of part-time work rather than the other way around (see also Schulenberg, Bachman, O'Malley, & Johnston, 1990); nevertheless, we acknowledge that some causal effects in the other direction are also likely to occur, and that in controlling for these educational experiences we run some risk of "overcontrolling." That risk should be kept in mind in interpreting the findings from this analysis.

Exploring patterns of relationships with part-time work, controlling background and other factors, using multiple classification analysis (MCA). As indicated earlier, a basic question addressed in this paper is whether there is some optimal number of hours for part-time work by high school seniors. Put differently, we want to know whether any problems associated with work seem to mount more rapidly once a certain number of hours is exceeded. Any such relationships are, by definition, not strictly linear. Thus this phase of our analysis requires a technique which can handle non-linear (as well as linear) relationships. We also need a technique which can deal with multiple predictors, some of which (e.g., region) are categorical rather than continuous.

Multiple Classification Analysis (MCA), a form of dummy variable multiple regression analysis, is ideally suited to this analysis task. It uses categorical predictors and is thus sensitive to non-linear as well as linear relationships (Andrews, Morgan, Sonquist, and Klem, 1973). Most of the predictors used in this phase of the analysis are categorical, and those which are more continuous are easily bracketed into a set of categories (thus making it possible to display relationships in a simple and straightforward manner, and also to discern any departures from linearity).

The first step in this part of the analysis examines how the background and educational success indicators are related, both bivariately and multivariately, to (a) employment (versus non-employment, or working without pay), (b) hours of work, and (c) pay per week and per

hour. The findings indicate the extent to which the work measures are predictable from background and educational success, and thus also indicate the extent to which controls for such factors might modify the relationships between part-time work and other outcome measures.

The next step examines patterns of relationship between hours of work and other outcome measures, both bivariately and with controls for the measures of background and educational success. We provide charts displaying the multivariate relationships along with the bivariate ones, to indicate the extent to which observed relationships with hours of work may be attributable to background and (prior) educational experiences.

We note in passing that the year of survey (i.e., senior class year, 1985-1989) is included as one of the "background" measures in the MCA analyses. We have no substantive interest in this measure, but we considered it necessary to introduce it as a control in order to take account of any year-to-year differences in the proportion of students working, the number of hours of work, and (more importantly) the tendency for earnings to rise over the years simply due to inflation. (To foreshadow the findings for this particular variable, it appears that such relationships are essentially orthogonal to the other relationships. Thus we are able to ignore the year-to-year variations; more important, we do not need to complicate the causal modelling by including year as one of the predictors.)

Causal modelling incorporating income, and controlling for age of drug use onset, using LISREL. This phase of the analysis focuses first on the role of earnings as a factor in any impacts of part-time work on the drug use outcome variables. A simple causal model is used, which controls for high school grades and examines the extent to which relationships between hours of work and outcome measures appear to be mediated via earnings. Then the model is expanded to control also for age of onset of several types of drug use.

Structural equation modeling analyses with latent variables were conducted to provide a simultaneous estimation of the parameters while accounting for possible attenuation in the structural coefficients due to measurement error. The structural equation modeling (SEM) analyses were conducted using LISREL VI (Joreskog & Sorbom, 1986) with maximum likelihood estimation procedures. (It is recognized that the use of maximum likelihood estimation procedures assumes that variables are normally distributed, an assumption that is not always met in the present data; nevertheless, previous research has indicated that maximum likelihood estimation procedures are robust vis-a-vis estimation procedures that do not assume multivariate normality, although they appear to result in inflated standard errors and chi-square fit indices (e.g., see Huba & Harlow, 1987; Windle, Barnes, & Welte, 1989).

Covariance matrices served as the data base for all SEM analyses; however, results are presented in standardized metric to facilitate interpretation. The fit of the models to the data was determined by several indices: 1) chi-square goodness-of-fit statistic, in which a non-significant chi-square suggests that the model provides a good fit to the data; however, this has limited utility in the present study because a significant chi-square is likely to result due to the power derived from the large sample size, and the chi-square test statistic is not robust to departures

from multivariate normality (e.g., Joreskog & Sorbom, 1986); 2) the Goodness-of-Fit Index (GFI) and Adjusted Goodness-of-Fit Index (AGFI, adjusted for degrees of freedom in the model), in which a value of .9 or above indicates that the model provides a reasonably good fit to the data (Joreskog & Sorbom, 1986); and 3) normalized residuals and modification indices, which provide an indication of the extent and location of "stress" in the model. The use of several fit indices reflects that all of the criteria have their limitations, and convergence among the criteria is the best overall indication of fit.

In addition, to compare the relative fit of related models and determine which is most acceptable, the difference in chi-square between nested models was used. (One model is nested in the other if the first can be obtained from the second by fixing or constraining one or more of the second's free parameters.) A significant difference in chi-square indicates that the less restrictive model provides a significantly better fit than the more restrictive model. Alternatively, the more restrictive model is accepted over the less restrictive model when the difference between the two is not significant.

The LISREL analyses build upon the earlier MCA analyses in several ways. First, the MCA analyses establish the appropriateness of treating key relationships as essentially linear in the LISREL analyses. Second, the MCA analyses indicate the extent to which the choice of high school grades as a single control variable is reasonable for these LISREL analyses (see also Schulenberg et al., 1990). Finally, the MCA analyses indicate the complexities of examining these relationships across racial groups. Our resolution of this latter problem, for present purposes, is to conduct the LISREL analyses on (non-Hispanic) White students only. Because White students comprise more than three-quarters of the sample, they tend to dominate relationships in any case. Nevertheless, if we were to include Black students, for example, the fact that they have lower levels of part-time work as well as lower levels of drug use might confound the relationships of primary interest unless complicated controls were introduced. For these analyses we have instead opted to focus on the single largest group; later analyses may consider whether similar patterns of relationship apply for Blacks and Hispanics.

Another important simplification for the LISREL analyses is to confine the sample to those working for pay. Since a primary focus is the extent to which variations in hours of work have their impacts via the (resulting) variations in income, it is necessary to restrict the analyses to those who work for pay (rather than confound the zero category on both dimensions).

RESULTS

Background and Educational Success Linked to Part-Time Work

Differences in proportions of seniors working. Before examining differences in hours of work, we consider a more fundamental distinction—working versus not working. As noted earlier, it is probably an oversimplification to treat the absence of a part-time job during the senior year as simply the end point on the hours of work continuum, since at least some of those

working zero hours would prefer to be working if they could find a suitable job. We also distinguish those who reported working but earning no pay. Table 1 presents MCA results, separately for males and females, for each of three dichotomous dependent variables: (1) not working (versus working, either for pay or not), (2) working for pay (versus not working, or working for no pay), and (3) working, but not for pay (versus paid work, or not working at all). By treating each of these dichotomies as dependent variables, we account for the full sample. We can also express our results as percentages of the total sample. For example, we can see from the first row in Table 1 that among males in 1985 there were 21 percent not working at all, 71 percent working for pay, and 8 percent in non-paying jobs; and among females in 1985 there were 25 percent not working, 67 percent in paid jobs, and 8 percent in non-paying jobs. The next rows in the table show that these proportions are quite similar across the years, although there is a slight increase in percentage working among males, and a slightly larger increase among females. The columns labelled "Adj." refer to the adjusted values taking account of all other predictors. It is clear that these adjustments make virtually no difference in the case of cohort (i.e., year of senior survey).

The findings for race are more interesting, showing that the proportions of White students in the non-working category (18 percent for males, 19 percent for females) are much lower than is true for Black students (33 percent for males, 37 percent for females), and that non-employment rates are intermediate for those in the Hispanic and Other categories. Here again the adjusted values are nearly identical to the unadjusted percentages, indicating that the race differences in rates of employment are not diminished when other aspects of background or educational success are controlled.

Parental education shows relatively little relationship with rates of employment, especially when other factors are controlled.

Rates of employment for seniors, especially females, are lower in the South, and in more rural areas. These distinctions are actually a bit stronger and clearer with other factors controlled.

Males not planning on college are more likely than average to work, but the same is not true for females. To a slight extent among females, and to a greater extent among males, those in the vocational-technical curriculum are more likely to be working. Since these two predictors overlap appreciably, it is not surprising that the adjusted relationships (among males) are weaker than the unadjusted ones.

Males with high school GPAs of A are less likely to work than other males, but those few seniors with C- or D GPAs are also less likely to work than those with intermediate GPAs. The latter is true also for females. One possible explanation for the slightly lower employment rates among students with the lowest GPAs is that they have greater difficulty finding and holding jobs, perhaps for much the same reasons that they have difficulty in school.

The R-squared values at the bottom of Table 1 indicate that the background and educational success measures account for just under four percent of the variance in working versus not working among males, and just over four percent among females.

Differences in hours and pay per week. Tables 2 and 3 present MCA results, for males and females (respectively) working for pay during their senior year. These tables show how hours worked per week, earnings per week, and a derived measure of pay per hour (see Appendix A) are linked to the background and educational success measures.

Hours per week varied little across the five senior classes included in these analyses, whereas pay per week and pay per hour showed the expected increase over the years.

Although we noted earlier the important race differences in proportions employed, when we limit our focus to those who are employed we find no important differences in hours of work related to race. On the other hand, Tables 2 and 3 do show higher than average weekly and hourly pay reported by Hispanic students, and especially by Black students. Interestingly, the hourly rates of pay for Black, and also Hispanic, seniors show little or no difference by sex; however, the pay rates for White females are distinctly lower than those for White males. We are not able in these analyses to discern the reasons for these differences, although as others have suggested, this gender differential in pay likely reflects the similar situation among adults (Mortimer et al., 1990).

Hours of work do not vary substantially by region or urbanicity, but pay rates are higher in the more urban areas and in the Northeast.

The several indicators of educational success, and also parents' education, are all negatively correlated with hours of work. The multivariate relationships are all weaker than the bivariate ones, reflecting the overlap among these predictors; however, none is reduced to zero. Since weekly pay is largely determined by hours worked, pay per week shows much the same relationships with the educational success measures (albeit a bit weaker). Pay per hour, on the other hand, seems not to be correlated with educational success, although those in the vocational-technical curriculum have slightly higher hourly rates than others.

The R-squared values indicate that the background and educational success measures can account for nearly seven percent of the variance in hours of work by male seniors, and nearly five percent for female seniors. The corresponding multiple-R values (unsquared, and adjusted for degrees of freedom) are .26 for males and .22 for females. These values are larger than the bivariate (eta) values for the strongest single predictor (curriculum), thus suggesting the value of multivariate controls. And, although the relationships are only moderate, they are strong enough to indicate the value of introducing such controls as we examine the relationships between hours of work and a wide range of possible outcome variables.

Problem Behavior I: Employment and Hours of Work Linked to Use of Drugs

Our earlier analyses of Monitoring the Future data showed some positive association between hours of work and use of drugs (Bachman et al., 1981; Bachman et al., 1986). We now return for a much more detailed look at such relationships, this time looking at the shapes of relationships both bivariately and with controls for background and educational success. These analyses examine not only variations in hours of work, but also look at those who reported no work and those who reported working but not for pay.

The results of these and subsequent analyses using MCA are presented in two complementary forms: tables displaying the full MCA results showing bivariate and multivariate relationships between each of the predictors and the dependent variable, and figures which repeat the findings for hours worked graphically. Although they are redundant with a portion of the corresponding tables, the figures provide the findings of greatest interest in the form which we judge to be most "user friendly." In addition, the figures exclude the "working but not for pay" category in order to emphasize the link between work intensity (i.e., number of hours worked) and substance use.

One other analysis decision also was made in the interest of "user friendly" tables and figures; we have presented the drug data in terms of dichotomies indicating prevalence of use, or of use at a particular level. That enables presentation of findings as percentages rather than as means on a scale. Converting these dependent variables to dichotomies reduces the variance to be explained and thus lowers eta and beta coefficients as well as R-squared values; however, the majority of seniors fall into a single category (non-users) along most of the drug use dimensions, so the reduction in variance to be explained is fairly modest. (Table 28 provides data on strength of relationships, including both continuous and dichotomous versions of the dependent variables.)

Cigarette use. Most high school seniors have tried cigarettes sometime in their lifetime, but most have not used them within the past year. Among the minority who report any use in the past year, most smoke on a daily basis and many smoke a half pack a day or more. The results of MCAs using hours of work, plus background and educational success measures, to predict prevalence of daily smoking are shown in Table 4, and those for prevalence of half-pack or more smoking are shown in Table 5 and also in Figure 1.

The bivariate (i.e., unadjusted) prevalence rates show that daily smoking is least prevalent among those who work five or fewer hours per week; specifically, Table 4 shows that 11.3% of males and 12.5% of females working five or fewer hours are daily smokers. With each increment in hours of work, the prevalence of daily smoking rises, so that in the top category (more than 30 hours of work per week) the prevalence rates are 25.2% for the males and 28.3% for the females—more than double the rates for those working five or fewer hours. The adjusted data indicate that with the background and educational success variables controlled the relationship is reduced somewhat, but not a great deal. The reduction can easily be seen in

Table 4 by comparing the bivariate eta values of .134 and .123, for males and females (respectively), with the corresponding multivariate beta values of .084 and .083.

Table 5 shows very similar findings for half-pack or more daily smoking prevalence, except that the contrast between the highest and lowest categories of hours per week is even more striking: among those working five or fewer hours per week only about 5-6% are half-pack smokers, whereas among those working more than thirty hours the prevalence rate is about 19%—a ratio of three-to-one. Even after controlling for background and educational success, the ratio is greater than two-to-one.

The strong relationship between hours of work and half-pack smoking, both before and after controls, is clearly evident in Figure 1. Particularly clear in the figure is the fact that the relationship is quite linear. Also evident in the figure (and the tables) is the finding that those with no job show below average smoking prevalences (more so for males than females), but not as low as those working five or fewer hours. In addition, as is evident in the tables, those working in non-paying jobs have smoking prevalence rates only slightly below the overall average.

Tables 4 and 5 provide a wealth of additional data which can only be noted in passing here, but which have been treated at length in other reports. For example, we see that the very large Black-White differences in smoking rates (reported by Bachman et al., 1991) become even more pronounced when background and educational success indicators are controlled (see Wallace and Bachman, under review). The tables also show that the educationally successful seniors are far less likely to be smokers (see Bachman et al., 1990; Schulenberg et al., 1990).

Alcohol use. The majority of high school seniors are current users of alcohol; indeed, fully two-thirds of the males and nearly as many of the females reported using alcohol during the past month. Table 6 and Figure 2 show that current alcohol use is positively related to number of hours worked. The relationship is fairly linear among males, whereas among females the highest prevalence rate occurs among those working 21-25 hours and drops off slightly for those working more hours. Controlling for background and educational success reduces these relationships only slightly (although in the case of the females the controls slightly reduce the curvilinearity noted above). Unlike the findings for cigarette use, these findings for current alcohol use show the lowest prevalence rates for those without jobs, and rates nearly as low for those with non-paying jobs.

The data for occasional heavy drinking (see Table 7 and Figure 3) show that nearly half of the male seniors and more than a quarter of the females had five or more drinks in a row at least once during the two weeks preceding the survey. This dimension of alcohol use also is positively related to hours worked, and the pattern is fairly linear among both males and females. Here again the prevalence rates are lowest among those not working and those in non-paying jobs. Controls for background and educational success reduce these relationships just a bit more than is the case for monthly prevalence.

Several additional contrasts between the alcohol and cigarette findings may be worth a passing note. Large differences between Black and White students are evident for alcohol use, particularly among females; but unlike the differences in cigarette use, these differences in drinking prevalence were not further enhanced by controls for other background measures and educational success. Another contrast is that college plans show much stronger inverse correlations with smoking than with drinking, whereas grades show only moderately stronger bivariate relationships with smoking. Finally, we note that parents' education is positively correlated with alcohol use both bivariately and multivariately, whereas for cigarette use, a negative bivariate relationship with parents' education is reduced to near zero in the presence of measures indicating the students' own educational success.

Marijuana use. Marijuana use has been declining steadily throughout the 1980s, as evidenced in the top portion of Table 8. (We note, moreover, that the eta and beta coefficients are nearly identical, indicating that the year-to-year changes are unrelated to the other variables in the MCAs.) The prevalence rates for marijuana are much lower than those for alcohol, which means that there is less variance to be explained. Still, this remains the most widely used illicit drug among young people.

Table 8 and Figure 4 show that marijuana use is positively related to hours of part-time work, although the patterns differ slightly between males and females. Among males the bivariate relationship is quite modest and fairly linear, but controls for background and educational success leave only a small distinction between those working ten hours or fewer versus those working more. Among females the bivariate relationship is somewhat stronger and not so much reduced by controls; but here there is little or no differentiation in marijuana prevalence related to variations in working time above fifteen hours.

Among both males and females, marijuana prevalence is lowest (or nearly so) among those not working and those in non-paying jobs.

Cocaine use. Cocaine use declined sharply after 1986, and monthly prevalence among high school seniors was quite low by 1989, as shown in the top portion of Table 9. (Here again, eta and beta coefficients are virtually identical, indicating that this secular trend is orthogonal to the other relationships shown in the table.)

Table 9 and Figure 5 show that monthly prevalence of cocaine use is positively correlated with hours of work; indeed, among males the prevalence among those working over thirty hours is more than double that of those working five or fewer hours (8.7% versus 4.0%), whereas among females the contrast between these two groups is even greater (1.6% versus 6.4%). The pattern is fairly linear, and only slightly reduced by controls for background and educational success. Given the relatively high cost of cocaine, it is perhaps not surprising that prevalence is lowest among those not working, and next lowest among those working in non-paying jobs—at least in the case of males. That pattern is not quite as clear among females (but that is a small distinction based on very small percentages).

Amphetamine use. The use of this drug also declined during the latter 1980s, as shown in Table 10, although the shifts were smaller than was true for marijuana and cocaine. (Once more eta and beta coefficients are virtually identical.)

Table 10 and Figure 6 show that monthly prevalence of amphetamine use, like the use of other drugs, is positively correlated with hours of work. The findings are much like those for cocaine, with prevalence at least twice as high among those working more than thirty hours compared with those working ten or fewer hours. There are slight departures from linearity, but we suspect these are largely random. The introduction of controls reduces the relationship only slightly. Among males, prevalence is lowest among those not working, and somewhat below average for those in non-paying jobs; among females these groups are below average also, but less so. (The gender distinction here matches that noted above for cocaine, but again the percentage differences are small.)

Summary. There are great variations among the five drugs reviewed here, especially in terms of prevalence rates among high school seniors. Nevertheless, we have observed a number of important similarities across these drugs, especially with respect to their relationship to hours of part-time work. First, consistent with our earlier findings and with other studies cited earlier, we saw positive bivariate relationships between hours of work and use of each drug. Put more simply, those who work longer hours are more likely to use each of the drugs examined here.

Second, as we sought to discover whether these bivariate relationships were attributable to other "third" variables, we saw that the introduction of controls for background and educational success reduced the strength of those relationships—generally by a factor of about one-quarter to one-third. On the one hand, such reductions leave most of the initial bivariate relationship intact; on the other hand, we must keep in mind that our set of control measures is necessarily incomplete, and not free from error. Thus we infer from these partial reductions in relationships that if better controls were available, then the reductions would probably be greater (We return to this issue in a later section).

Third, we saw that the patterns of relationship between hours of work and each dimension of drug use were in most respects fairly close to linear, both before and after controlling for background and educational success. Certainly one cannot look at the several tables and figures presented in this section and conclude that there is some clear and consistent number of hours of work above which things "get worse more quickly," or below which the number of hours worked show little differential impact on drug use. To the contrary, the most general interpretation of the drug use findings in this section would have to be that part-time work is related to drug use, and the more hours worked the greater the likelihood of use. Incidentally, although these mostly linear relationships are consistent with our own earlier analyses of drug use, they contrast somewhat with the recent findings of Steinberg and Dornbusch (1991); their overall index of drug use rose sharply between 1-10 hours and 11-15 hours, but showed little further change at 16-20 hours or 21+ hours.

Fourth, we see that the use of most drugs is at or near the lowest levels among those not working at all—at least for males. Among females the same pattern is clear for alcohol use, but not quite so clear for other drugs. Still, if we were to base our conclusion only on the data presented thus far, we might well conclude that not working can indeed be treated as a simple end point to the continuum of hours worked. Some of the findings reported below make that generalization less appropriate. But in the case of drug use, with the possible exception of cigarette use among girls, it does seem to be the case that those not working are among the least likely to be "at risk."

One of the reasons for the lower risk among the non-employed seniors, and also among those working few hours, is that they may not have as much money to spend for socializing in general and alcohol and drugs in particular. Thus one of the additional factors we wish to explore, especially with respect to drug use, is the variation in earnings which corresponds to variations in hours of work. We turn to that topic later in this report.

Problem Behavior II: Employment and Hours of Work Linked to Other Deviant Behaviors

Drug use has been a focus of great concern in recent years, but there are a variety of other deviant or "problem" behaviors which for many years have been studied by those interested in youth and in social problems. We turn now to a set of measures in which seniors report their own misbehaviors, and also their victimization by the misbehaviors of others.

The measures in this section are derived from single questionnaire forms (unlike the drug use measures which appeared in all forms). Accordingly, the sample sizes are only about one-fifth as large as those for the drug analyses, and the levels of precision are reduced by a factor of about 2.2 (i.e., the square root of 5). The result is a greater degree of "bumpiness" in relationships; nevertheless, we will be able to detect broad patterns reasonably well. For the sake of brevity, we will not discuss specific relationships involving the background and educational success measures, but we note that the findings are detailed in the tables.

Interpersonal aggression. Table 11 and Figure 7 show that interpersonal aggression is positively correlated with hours of work, and the relationships are reduced to only a slight extent when background and educational success are controlled. Males working more than thirty hours per week report twice as much aggressive behavior as those working fifteen or fewer hours, and the story is much the same for females (although their rates of aggression are far lower than those of males). (Note that the scaling of this index is such that the lowest possible score is 1.0, indicating zero aggressive behavior. Therefore, even among males working over 30 hours per week, aggression is not that extensive.) Among both males and females the pattern of association departs somewhat from linearity (as can be seen by comparing r and eta values in Table 28); there is little variation in aggression until hours of work are fairly long—indeed, the real increases involve only the longest hours worked. Here, as was true for most dimensions of drug use, those not working or not in paying jobs showed very low levels of deviant behavior.

These findings offer some support for the argument that working very long hours (in addition to attending school) can leave seniors irritable and aggressive.

Theft. The index of theft also is positively related to hours worked, as shown in Table 12 and Figure 8, with little change after inclusion of the control measures. The pattern is roughly linear among males, although here again prevalence jumps considerably for those working over 30 hours per week; among females, theft seems to rise above ten hours of work but change little thereafter. Those not working or in non-paying jobs showed some of the lowest levels of theft.

The findings here certainly do not suggest that the lack of money causes high school seniors to steal; to the contrary, those with perhaps the lowest incomes (i.e., those not paid, and those working few hours) also reported the least theft.

Trouble with police. A single item asked seniors how often in the last twelve months they had gotten into trouble with police because of something they did; most said not at all, and most of the rest reported that it happened only once. We thus chose to analyze a simple dichotomy, as we did for the drug use measures, and we report percentages who had any trouble with police. The results in Table 13 and Figure 9 show somewhat positive correlations with hours of work. Among males those not employed or not in paying jobs show the lowest prevalence of trouble with police; however, that is not the case for females.

On the whole, and especially in the case of males, these findings do little to support the notion that having students actively involved in part-time jobs will keep them out of trouble with police. (Of course, this leaves open the question of how much more trouble those working long hours might encounter if they were not working such long hours.)

Arguing or fighting with parent(s). Another single item asked seniors how often in the last twelve months they had argued or had a fight with either parent. About half of the females and nearly as many males chose the top response category (five or more times), and the overall means show that the typical senior recalled having three or four such encounters. (Incidentally, we suspect that the majority of such encounters are more aptly described as "arguments" than as "fights." Certainly the gender difference here, which contrasts sharply with gender differences in the aggression items, is consistent with that suspicion.)

The relationships displayed in Table 14 and in Figure 10 show that as hours worked increase from fewer than five up to the sixteen-to-twenty hour category, arguments/fights with parents tend to increase; however, beyond twenty hours the pattern for males is bumpy and difficult to interpret, whereas for females the confrontations with parents seem to decline somewhat as hours of work increase beyond twenty (although the latter finding is damped down after controlling for background and educational success). The lowest rates of arguments/fights occur among those not working.

A glance at the control measures in Table 14 reveals a number of other interesting, and sometimes complicated, relationships involving this particular dependent variable. These include (a) very large racial differences, with Black seniors reporting substantially fewer arguments and fights with parents; (b) some interesting "unmasking" in which the negative relationships with grades become much stronger and clearer when the other predictors are included in the equation; (c) the finding that arguments and fights are actually positively related to parents' educational attainment, to college plans, and to being in the college prep curriculum; and (d) the finding that reported arguments and fights with parents actually increased very slightly between 1985 and 1989, in spite of the fact that one potential source of such conflict—the use of drugs—was declining.

A fairly literal reading of the hours of work findings (at least the data for females) might lead to the curious conclusion that either little or no work, or else long hours of work, are most likely to limit confrontations with parents. But given the other interesting patterns of association noted above, it is not entirely clear that avoiding confrontations is optimal. We are left with an interesting set of findings which call for much more thorough exploration, but we must defer that for now and return to our main focus on part-time work.

Victimization. We reported above that those working longer hours are generally more likely to be perpetrators of aggression and theft; now we consider whether they are also more likely to be on the receiving end of such behaviors. Our earlier analysis examined a number of items separately, and nearly all showed "...a clear tendency for higher rates of victimization among those working the longest hours" (Bachman et al., 1986, p. 92). For present purposes we employ a single index of victimization.

Table 15 and Figure 11 show somewhat bumpy but predominantly positive associations between hours of work and victimization. At the extremes, rates of victimization are at least half again as high among those working more than thirty hours compared with those working five or fewer hours, or those with no job. Controlling for background and educational success leaves these patterns virtually unchanged. These findings are generally consistent with our earlier ones, but in the early study we also examined a more specific measure of victimization in school (inside or outside or in a school bus). Our summary and interpretation of the earlier findings on victimization bears repeating here:

"Is there something specific to the work environment that causes these higher levels of victimization? If so, then we might expect to find little or no relationship between hours of work and victimization in school. (Indeed, because those working longest hours on the job tend to spend less time in school, their rates of in-school victimization might actually be lower than average.) In fact, however, nearly two-thirds of all victimization among high school seniors occurs in school (including school grounds and busses), and this ratio is just the same for those working many hours outside of school as for those with few or no hours on a job. It thus appears that the relationship between working hours and victimization reflects something more than particular job environments and experiences. The more likely explanation is that those who

seek and obtain long hours of work while in high school depart from average in a number of respects, including both delinquency and victimization" (Bachman et al., 1986, p. 92).

Summary. Like the measures of drug use examined in the preceding section, these several measures of other deviant behaviors have shown generally positive relationships with hours of work, although some of the patterns have departed from linearity in various ways. There is little in these shapes of relationship, taken together, which would indicate some optimal number of hours that high school students could work before generating some increase in problem behavior. Rather, it appears that each increase in number of hours worked is associated with an increase in one or more of the problems. Causal interpretations, of course, remain more difficult; however, it should be recalled that the introduction of controls for background and educational success did little to change the bivariate relationships in this section.

We note also that the findings in this section generally showed those with no job to be at or near the bottom of each scale of deviant and problem behaviors. We noted in our summary of the drug use findings that the evidence in that section points mostly to the interpretation that not working can reasonably be viewed as the end point on the continuum of hours of work. The findings in this section could be used to support the same conclusion. In the next sections, however, we will see some findings which suggest that we should continue to treat not working as a separate category rather than as the end point of the continuum.

Time Use I: Employment and Hours of Work Linked to Health-Related Behaviors

One of the criticisms of part-time work among high school students, especially when it involves long hours, is that it steals time from other important activities—including such important matters as taking time to eat breakfast, getting enough sleep, and periodically exercising. In this section we examine each of these three behaviors, again using questionnaire data from one fifth of the total sample.

Getting enough sleep. To the question "How often do you get at least seven hours of sleep?" the median response among high school seniors is "Most days" (which is the fourth category on a six-point scale ranging from "Never" to "Every day"). Table 16 and Figure 12 show relatively strong negative correlations between hours of work and getting seven hours of sleep. The relationships are equally strong among males and females, they are almost perfectly linear, and they are utterly unaffected by controls for background and educational success. Among males, those not working, and those working in unpaid jobs, are nearly as well off (in terms of sleep) as those working up to five hours. Among females, those not working are most likely to get seven hours of sleep, whereas those working in non-paying jobs are about average in terms of sleep.

Eating breakfast. The responses to the question about eating breakfast are bimodal: more than a third of the males, and even more females, report that they seldom or never eat breakfast; more than a third of the males, but only half as many females, report doing so every

day or nearly every day. The relationships with hours of work are displayed in Table 17 and Figure 13. Here again the behavior shows fairly strong negative correlations with hours of work, and patterns which are nearly linear. Here, however, there is a modest reduction in the strength of relationship when other factors are controlled. Again, those with no job do somewhat better than average, but not as well as those working very few hours.

Exercising vigorously. The question about exercise refers to jogging, swimming, calisthenics, or any other active sports. We suspect that some respondents are unlikely to include vigorous work activity within this category, and thus any on-the-job exercise is likely to be underestimated. The relationships involving this measure are shown in Table 18 and Figure 14. The results are similar to those for the other health-related behaviors—up to a point. As hours of work increase the likelihood of exercise goes down, up to the category of 21-25 hours of work. Beyond that point, however, further increases in hours are associated with increased reports of exercise. This is true for both males and females, and the pattern becomes more pronounced when background and educational success are controlled. It may be that working long hours often includes enough vigorous activity to be reported in this question (in spite of the wording bias in favor of sports). It seems less plausible to us that increasing the hours committed to part-time work by another five or ten or more hours would free up more time for sports. Here again those without jobs are better off than average (i.e., exercise more), but not as well off as those working just a few hours.

Summary. If we were looking for a "smoking gun" to help convict long hours of part-time work as a hazard for high school students, our best candidate thus far is the relationship with hours of sleep. Controls for likely prior causes such as background or educational success have no effect whatever on this relationship. And the interpretation seems completely straight forward: students who spend more hours on the job simply have less time for sleep. To a considerable extent, they also short-change themselves with respect to other health-relevant behaviors such as eating breakfast and exercising vigorously. On the other hand, these findings also show that in general those who work ten or fewer hours per week are no worse off than those with no job—and those who work just five or fewer hours actually seem somewhat better off.

Time Use II: Employment and Hours of Work Linked to Truancy, Dating, and Evenings Out

If long hours of part-time work result in fewer hours for sleep, exercise, and proper eating, then perhaps this competition for time is also reflected in greater frequencies of truancy and less time for dating and other evenings out for recreation. In this section we explore these questions, using items which appear on all questionnaire forms.

Truancy. Males miss more days of school than females (for reasons other than illness); however, Table 19 and Figure 15 indicate that for both sexes those working more than thirty hours on a job miss twice as many days, on average, as those who work five or fewer hours

(note that the lowest possible score is 1.0, indicating zero days missed). The relationships are essentially linear, and are reduced only modestly when background and educational success are controlled. Those with no job are roughly comparable to those working just 6-10 hours on a job. Very similar, albeit weaker, patterns were found for a measure of classes skipped (data not shown).

Evenings out for fun and recreation. Do those who work long hours have less time to go out just for fun and recreation? The results in Table 20 and Figure 16 show only weak relationships which appear curvilinear. Those working 16-20 hours per week are most frequently out for fun and recreation, whereas increased hours beyond that seem associated with slightly fewer evenings out. However, the eta and beta coefficients are very low, thus indicating that evenings out have little to do with work intensity.

Dating. Does the time competition of long hours on a part-time job give seniors less time for dating? Here the findings, displayed in Table 21 and Figure 17, are unequivocal—and the answer is negative. Or perhaps it would be more accurate to say that in spite of whatever time restrictions their jobs impose, those who work longer hours average more evenings out on dates. (We should note, however, that all of the categories shown in Table 21 averaged below 4.0, which corresponds to dating once a week.)

Among males there is fairly linear positive association between hours worked and frequency of dating, those with no job or no paid work date least frequently of all, and the bivariate relationship is virtually unchanged by the inclusion of controls for background and educational success. Among females the relationship is linear up to the 21-25 hours category, but higher hours are not associated with any increase in dating. Females not working and those with non-paying jobs show rates of dating just above those for females working five or fewer hours. These relationships for females are reduced slightly by the controls.

The findings for dating suggest once again the importance of the income associated with work—all the more so when we note that the pattern is a bit clearer for males, given that the financing of dating still tends to fall more heavily on males than on females.

Subjective Experiences: Employment and Hours of Work Linked to Satisfaction and Self-Esteem

Most of the outcomes considered thus far have been rather objective indices of psychosocial functioning. But any verdict regarding work status and intensity during adolescence should depend also on how they influence adolescents' self-reported happiness and well-being. In this section we consider subjective indices related to satisfaction with life overall, to satisfaction with specific aspects of adolescents' lives and to self-esteem. The questionnaire data are based on one-fifth of the total sample, and consist of responses to five questions regarding extent of satisfaction (higher scores reflect greater satisfaction) and five questions regarding self-esteem (totaled and used as an index score). As will be obvious, males report greater satisfaction and

self-esteem than females, a finding consistent with other studies on emotional well-being during adolescence.

Satisfaction with life. Results regarding satisfaction with life are presented in Table 22 and Figure 18. For males, the relationship between work intensity and satisfaction with life appears non-linear, with those working 6 to 10 hours per week reporting the greatest satisfaction with life, followed by those who work for no pay. Those who do not work report about the same level of satisfaction with life as those who work 11 to 30 hours per week. Those working more than 30 hours report the least satisfaction with life. The adjusted scores tell a similar story, with the adjustments serving to lower somewhat the scores for those working fewer hours and to increase the scores for those working more hours.

For females, the relationship again appears non-linear. As with males, those working 6 to 10 hours a week as well as those working without pay report the greatest satisfaction with life. There appears to be little difference in reported satisfaction among those working 1 to 5 and 11 to 25 hours per week. However, after 25 hours per week, there is a sharp decline in reported satisfaction, particularly among those working more than 30 hours per week. With the exception of decreasing reported satisfaction among those working 1 to 5 hours, the adjustments had relatively little impact on the scores.

Satisfaction with self. Results regarding satisfaction with self are presented in Table 23 and Figure 19. As is evident, there is little relationship between work intensity and satisfaction with self for both males and females. It is noteworthy, however, that working more than 30 hours per week is associated with the highest average levels of satisfaction with self among males, but the lowest average levels among females. This is similar to the findings of Yamoor & Mortimer (1990). Among females, those who do not work report the greatest satisfaction with self, followed by those who work 6 to 10 hours per week and those who do not work for pay. For both males and females, adjustments had little impact on the scores.

Satisfaction with amount of fun. Results regarding satisfaction with how much fun one is having are presented in Table 24 and Figure 20. For males, the relationship is somewhat negative, but bumpy. Those who work 6 to 10 hours per week report the greatest satisfaction with how much fun they are having, followed by those who work for no pay. There appears little difference in reported satisfaction with amount of fun among those not working, those working 1 to 5 hours, and those working 11 to 30 hours. Reported satisfaction with amount of fun appears lowest among those who work in excess of 30 hours. The controls exerted little impact on the scores.

For females, the relationship is clearly non-linear, with reported satisfaction with amount of fun being highest among those who work 6 to 10 hours a week. Reported satisfaction declines in a linear fashion thereafter with increasing hours, until a considerable drop in satisfaction among those working more than 30 hours per week. Females who worked only 1 to 5 hours per week reported satisfaction levels in line with those who worked 21 to 30 hours per week. Those not working reported satisfaction levels above the mean, whereas those who

worked without pay reported satisfaction levels near the mean. Again, the controls exerted little impact on the scores.

Satisfaction with leisure time. One might suspect, given the previously-described results regarding time constraints (e.g., sleep-time), that satisfaction with leisure time is negatively related to work intensity. As is evident in Table 25 and Figure 21, such is the case for both males and females. The relationships are nearly linear, fairly strong, and virtually unaffected by the control variables.

Satisfaction with job. The final aspect of satisfaction considered is job satisfaction. Results are presented in Table 26 and Figure 22. (As indicated in Table 26, some of the non-working students—about 15% of the non-working males and 10% of the non-working females—responded to this question. These subjects may be responding to a previous job; in any case, their numbers are sufficiently large to suggest that their definition of "a job" as they answer this question is less stringent than the one used in the job status/work intensity question described previously. In Figure 22, only those who worked are included.)

For males, the relationship is non-linear, with job satisfaction lowest among those working 11 to 15 hours (a level of work intensity that appears to be optimal for some other outcomes), and highest among those working in excess of 30 hours. For females, the relationship is somewhat linear, with job satisfaction highest among those working 16 hours or more a week (especially once controls are included).

Self-esteem. Table 27 and Figure 23 summarize the findings for self-esteem. For males, there appears to be virtually no relationship between hours worked per week and self-esteem. For females, there is some "bumpiness" in the relationship, with self-esteem being slightly lower among those not working. Nevertheless, as for males, there appears to be little connection between hours worked and self-esteem among females.

Summary. The satisfaction indices provide unique and important information regarding the impact of work status and intensity. Among the more striking findings, those working 6 to 10 hours per week (both males and females) tend to be among the most satisfied. For females, working only 1 to 5 hours per week does not appear to engender high levels of satisfaction, a finding that may be due less to the number of hours, per se, than to the type of work that females working less than 5 hours per week are likely to hold (e.g., babysitting). For males, those working the longest hours (i.e., over 30 hours per week) report both the highest job satisfaction and highest satisfaction with self. At the same time, they report the lowest satisfaction with fun and recreation. These patterns generally hold for females working the longest hours, with the exception of satisfaction with self. Perhaps working at a near full-time level during the senior year of high school, especially among males, engenders more of an adult-like perspective on work, and perhaps these students are a few steps closer to assuming adulthood roles than their age-mates working fewer hours. As noted in previous studies (e.g., Bachman et al., 1986; Steinberg & Dornbusch, 1991), self-esteem shows little association with number of hours worked per week.

LISREL Results: Substance Use

Structural equation modeling (SEM) analyses were conducted in an effort to distinguish the impact of work intensity from the impact of salary on substance use. In addition, the SEM analyses were used to estimate the impact of previous experience with drugs and alcohol on the relationship between part-time work and current drug and alcohol use.

Separate analyses were conducted for each substance use outcome for males and females. In addition, two causal patterns were tested: a) the impact of work intensity and pay per week on each index of substance use, while controlling for high school grades; and b) the same causal pattern with the addition of previous experience with drug and alcohol use (i.e., a retrospective account of the grade level when a given substance was first used) as an exogenous construct.

Measurement Models. With the exception of the "early drug use" construct, all constructs were measured with single indicators. As recommended by Hayduk (1987), error terms were estimated and included in an effort to exclude measurement error from the structural coefficients. These estimations were based on previous analyses (e.g., O'Malley, Bachman, & Johnston, 1983), and reasonable estimates based on preliminary analyses. The "early drug use" construct was measured with five items pertaining to the respondent's grade level when he or she first tried cigarettes, tried alcohol, got drunk, smoked cigarettes on a daily basis, and tried marijuana. Responses were reverse-coded, such that a high score indicates earlier use of drugs and alcohol. We note that this is clearly an imperfect control of previous drug and alcohol use, but it does provide some insight into potential causal relations. Additional information regarding the measurement models is provided in Appendix C.

Cigarette use. The structural component of Pattern A is illustrated in Figure 24. (Unique factor variances are not presented for "hours" and "pay," but are easily calculated by squaring the incoming path and subtracting the quantity from 1.00.) As is evident, high school GPA is hypothesized to contribute to both work intensity and current cigarette use, and work intensity is hypothesized to contribute to weekly salary. Four versions, or models, of Pattern A were tested to determine whether work intensity (i.e., path a) and/or salary (i.e., path b) also contribute directly to current cigarette use. In Model 1, both path a and b are hypothesized to be zero; in Model 2, only path a is hypothesized to have a significant influence (path b is zero); in Model 3, only path b is hypothesized to have a significant influence (path a is zero); and in Model 4, both path a and b are hypothesized to have significant influences on cigarette use. These four models are "nested," thus making it possible to compare them statistically to determine which provides the best fit (note that Model 2 and 3 are not directly comparable because one is not nested in the other).

The structural component of Pattern B is illustrated in Figure 25. (Again, unique factor variances are not presented. For "Hours," the variance accounted for is the sum of the square of the two incoming paths, and twice the product of each incoming path and the correlation between the two endogenous paths; the corresponding unique factor variance is the variance

accounted for subtracted from 1.00. For "pay," the unique variance is the square of the incoming path subtracted from 1.00.) Pattern B builds on Pattern A by including the early drug use construct. This construct is hypothesized to be correlated with high school GPA, and to contribute to work intensity and current cigarette use. The four models of Pattern B are analogous to those of Pattern A. Thus, in comparing the accepted models for Pattern A and Pattern B, it is possible to determine the extent to which work intensity and salary contribute to current cigarette use "unadjusted" and "adjusted" for the influence of early drug use.

As is evident in both Figures 24 and 25, fit indices are provided for each model; these include chi-square goodness of fit statistic, Goodness of Fit Index (GFI), and Adjusted Goodness of Fit Index (AGFI) (see previous description in Methods section). In addition, for each model, the figure provides the estimated beta coefficients for work intensity (path a) and salary (path b), and the percentage of variance in current cigarette use accounted for in the model (i.e., unique factor variance subtracted from 1.00, multiplied by 100). An asterisk indicates which model was judged most acceptable, based on the size (and significance) of the coefficients, chi-square tests for nested models (see previous description in Methods section), and parsimony. All structural coefficients are in standardized metric. The coefficients provided in the figures are from the accepted model (the values of these coefficients varied little, if at all, across the different versions of the models).

In considering Pattern A for males in Figure 24, each of the models provide a rather good fit to the data. Models 2, 3, and 4 provide a significant improvement in fit over Model 1 (each nested chi-square was significant at the .001 level). Model 4 provides a significantly better fit than Model 3 but not Model 2. Between Models 2 and 4, Model 2 is selected because: a) they provided equally good fits, but Model 2 is more restrictive and thus more parsimonious; and b) the coefficients for paths a and b in Model 4 reflect what may be called a "beta bounce," in which one coefficient is compensating for the other — this is likely to reflect a specification error, suggesting that Model 4 would not be acceptable. Thus, within the constraints of Pattern A, cigarette smoking among males is positively influenced by work intensity (path a), but not at all influenced by salary. For females, however (following the same logic of model comparison), Model 4 provides the most acceptable fit. Thus, in contrast to males, salary does have an influence on current cigarette use among females. In fact, salary appears to have a stronger direct effect than does work intensity, although work intensity also operates indirectly via salary.

In considering Pattern B for males in Figure 25, it is again evident that each of the four models provide a good fit to the data. As was the case with Pattern A, Model 2 provides the most acceptable fit to the data within Pattern B (the same logic of model comparison detailed previously was followed here). It is noteworthy that early drug use contributes positively to current work intensity, suggesting that at least some of the negative influence typically attributed to part-time work is due to selection factors (i.e., those who used drugs earlier than their peers currently work more hours and smoke more cigarettes than their peers). Indeed, the inclusion of early drug use served to reduce the magnitude of the effect of work intensity on current

cigarette use by a factor of almost 3 (.15 vs .06). Furthermore, in terms of variance explained, Model 2 provides only a very small improvement over Model 1.

In Pattern B for females we see again that early drug use contributes positively to current work intensity. We also see in Pattern B that once early drug use is included in the model, the direct effect of work intensity on cigarette use is no longer significant, and the influence of salary is reduced by about one-half to an almost trivial effect. Indeed, Model 3 (the accepted model) provides no improvement at all over Model 1 in terms of explained variance.

Alcohol use. The results regarding current alcohol use are presented in Figures 26 and 27 for Patterns A and B, respectively. For Pattern A among males, Model 2 provides the most acceptable fit, indicating that work intensity, but not salary, has a direct (positive) effect on alcohol use. Among females, it is salary rather than work intensity that has a direct positive effect on current alcohol use. Thus, while work intensity has an indirect effect via salary, it has no direct effect.

For Pattern B among males, the story is similar as it is for Pattern A, but the inclusion of early drug use serves to reduce the influence of work intensity on current alcohol use by a factor of almost 3. Moreover, none of the other models explains any more variance than Model 1. (Note: Technically, in Pattern B, Models 2, 3, and 4 each provide a significantly better fit than does Model 1; however, the fit is not all that much better in the other models, and given the size of the coefficients for paths a and b, Model 1 is the most parsimonious model.) Likewise, for Pattern B for females, the magnitude of the influence of salary is reduced considerably (by a factor of over 3) once early drug use is included in the model. Again, for Pattern B the other models provide no improvement over Model 1 in terms of explained variance.

Heavy alcohol use. The findings for heavy alcohol use (i.e., number of times in the last two weeks that the individual had five or more drinks in a row) are quite similar to those for current alcohol use. As is evident in Figure 28, for males, Model 2 is most acceptable for Pattern A. That is, work intensity, but not salary, has a direct positive effect on heavy alcohol use. For females, it is again salary and not work intensity that has a direct positive effect (i.e., Model 3 for Pattern A). As evident in Figure 29, once early drug use is included in the model for males, the effect of work intensity is reduced by about one-half, although it remains a significant predictor of heavy alcohol use. Nevertheless, although Model 2 is accepted for males, it demonstrates little improvement over Model 1 in terms of explained variance in heavy alcohol use. For females, when early drug use is included, the impacts of both work intensity and salary are essentially reduced to zero. That is, as evident in Figure 29, Model 1 proves to be the most acceptable model, indicating that any linkage between part-time work and heavy alcohol use among females is entirely attributable to their common relationship to early drug use (i.e., it is spurious).

Marijuana use. The results for current marijuana use are presented in Figures 30 and 31 for Patterns A and B, respectively. For males, Model 2 is accepted for Pattern A, indicating

once again that work intensity, rather than salary, has a direct positive influence on substance use. For females in Pattern A, it is again salary rather than work intensity that has a direct positive influence on substance use (i.e., Model 3 is accepted). Once early drug use is included for males (Pattern B), Model 1 proves to be the most acceptable. That is, the inclusion of early drug use serves to eradicate any effect of part-time work on current marijuana use. Likewise, for females, once early drug use is included (Pattern B), any effect of part-time work on current marijuana use is eradicated (i.e., Model 1 is accepted).

Cocaine use. The final substance use indicator to be considered is current cocaine use, and the findings are presented in Figures 32 and 33 for Patterns A and B, respectively. For Pattern A, the findings are remarkably consistent regardless of gender. That is, it is clearly salary rather than work intensity that has a direct positive effect on current cocaine use for both males and females (i.e., Model 3 was most acceptable). Given that cocaine costs considerably more than other substances, these findings are not surprising.

As evident in Figure 33, the inclusion of early drug use reduces the impact of salary on cocaine use by roughly one-half for males and females. Given the rather trivial magnitude of the salary paths, as well as the lack of increase in variance explained, Model 1 is accepted for both males and females.

Summary. It must be noted that based on the LISREL analyses, the models that exclude any direct influence of part-time work (work intensity and salary) are generally well-fitting models. In most cases, the inclusion of direct part-time work effects significantly increase the fit of an already acceptable model. This is not to deny the explanatory importance of part-time work on substance use, but only to place it within a "bigger picture."

There is a clear pattern of gender differences. For males, work intensity, rather than salary, tended to have a direct positive influence on substance use. The opposite was true for females. However, when cocaine is the outcome measure, the effect of salary is stronger than that of work intensity for both females and males.

The inclusion of early drug use tended to "dampen-down" the impact of part-time work for both males and females; in the case of current marijuana, alcohol, and cocaine use, the inclusion of early drug use completely eradicated the impact of part-time work. Early drug use was found to positively influence work intensity, and indirectly, salary, suggesting that part-time work may not be as strong a causal agent of substance use as is typically considered (cf. Steinberg et al., 1982; Steinberg & Dornbusch, 1991).

SUMMARY AND CONCLUSIONS

Should an adolescent work during the school year? And, if so, how much? These questions remain difficult, at least for us, because we think the answers depend heavily on initial

assumptions and the analysis strategies which are based on those assumptions. Of course, it also depends on the type of work, and how that work may fit into the adolescent's future goals.

The observations of Steinberg and Dornbusch, based on their recent study of the impacts of adolescent employment, provide one set of answers to the above questions: "Contrary to the popular belief that working during adolescence is beneficial to young people's development, the findings presented here indicate that the correlates of school-year employment are generally negative" (1991, p. 309). Do their findings suggest to them any "optimal" level at which part-time work is better than no job at all? "Unfortunately, with few exceptions, the analyses presented in this study do not reveal clear hours thresholds beyond which the correlates of employment become dramatically more negative" (p.310). Steinberg and Dornbusch then draw a straightforward conclusion: "The most prudent interpretation of these data, therefore, suggests simply that the potential risks of part-time employment during the school year increase with increasing time commitments to a job" (p. 310).

Bivariate Relationships and Possible Implications

Our own bivariate findings from the present analyses of seniors in the classes of 1985-1989, along with most of our earlier analyses (Bachman et al., 1986), are largely consistent with the above observations by Steinberg and Dornbusch. As reported in Figures 1-15 (solid lines showing bivariate relationships), hours of work are positively correlated with smoking cigarettes, drinking alcohol, using illicit drugs, interpersonal aggression, theft, trouble with police, arguments with parents, victimization, lack of sleep, lack of exercise, and truancy. Hours of work are negatively correlated with seniors' satisfaction with the way their leisure time is spent and the amount of fun they are having (Figure 20 and 21). The fact that hours of work are correlated with frequency of dating (Figure 17) may be one positive finding from a teenager's perspective, but in the eyes of some parents even that may not be an unalloyed benefit. It is worthwhile to note that self-esteem showed little association with hours worked.

In the present analysis we have been able to examine the shapes of relationships with hours of work in considerable detail; whereas Steinberg and Dornbusch (1991) used four categories (1-10 hours per week, 11-15, 16-20, 21+), we used seven (1-5 hours per week, 6-10, 11-15, 16-20, 21-25, 26-30, 31+), and we were able to observe some important variations at the upper levels of hours worked. We found some departures from linearity, to be sure; however, these departures were not consistent across variables and often not even consistent between males and females on the same variable. Table 28 summarizes the bivariate relationship between hours worked and each of the dependent variables, separately by gender (similar information is provided in Appendix B for those who work but not for pay). We present hours of work once with the zero category included, and then again with that category excluded. Two indicators of strength of relationship are compared: the product-moment correlation (r), which reflects only linear relationship; and, the eta statistic, which reflects both linear and non-linear relationship. The degree of non-linearity is reflected by the extent to which eta exceeds the corresponding r value. As is evident throughout Table 28, the dominant finding remains that

with each increase in numbers of hours worked most of the associated problems tend also to increase. Thus, a fair reading of our bivariate findings would be that 1-5 hours of work per week is "better" for seniors than 6-10 hours, which in turn is "better" than 11-15 hours, and so on.

Is no work at all better than 1-5 hours per week? Here the differences generally are small and not at all consistent. Thus one might reasonably conclude that there is little or no "harm" in seniors working a very few hours per week, and such work may be beneficial.

MCA Results Controlling Background and Educational Success

The bivariate findings summarized above are of descriptive value, but they do not clearly confront the central problem in cross-sectional studies of students' part-time work: are those things which correlate with hours of work also the consequences of such work? As Steinberg and Dornbusch acknowledge, "It is not possible to rule out the arguments that the results merely reflect differential selection into the workplace..." (1991, p.311); nevertheless, it seems clear that those authors favor a particular causal interpretation, as indicated by statements such as, "... students who work long hours do less well in school than their peers," and such differences are "... of sufficient magnitude to warrant concern" (p. 310). Our interpretation of that relationship is somewhat different; although we agree that long hours of work may contribute to poor school performance, we think it is especially likely that students with a history of poorer grades and less interest in present (and future) schooling are—as a consequence—more willing to spend long hours in a part-time job. That latter causal interpretation was incorporated in our multivariate analyses, as noted earlier, even though it involved some risk of "overcontrolling" educational success.

Now, as we review the MCA results, it seems that any overcontrolling of educational success was probably not a serious problem. Controlling educational success, as well as various background factors, certainly "damped down" the apparent effects of hours of work on some outcome measures, especially drug use. On the other hand, even after all such controls, substantial positive relationships between hours of work and drug use remained (see Figures 1-6). Moreover, some of the bivariate relationships were little changed after the inclusion of the other predictors. Most notably, for the outcome dimension where causal interpretation seems clearest and most straightforward—loss of sleep time as a result of high hours of part-time work—controlling for educational success and background factors did not modify the bivariate relationship at all (see Figure 12).

Table 29 provides a summary of the strength of bivariate (eta) versus multivariate (beta) relationship with work status and intensity, based on the detailed MCA results in Tables 4-27. The MCA analyses give us a rather complex answer to the question of whether the correlates of part-time work are also its consequences. When the controls for background and educational success show virtually no impact (e.g., the negative correlation between hours of work and hours of sleep), we have greater confidence in suggesting a causal interpretation. But when the controls lead to important reductions in strength of relationships (e.g., the positive relationships

with drug use, which showed multivariate coefficients about one-quarter to one-third lower than the bivariate coefficients), then we are left with the difficult question of whether we have "overcontrolled" or "undercontrolled." In our judgment, the MCA results probably reflect insufficient rather than excessive controls, for three reasons: First, although we view our educational success measures as mostly causally prior to senior year hours of work, the MCA multiple regression approach does not impose such a causal ordering—it simply treats both (along with background factors) as "co-equal" predictors of each dependent variable. Second, our set of control measures is surely incomplete. Third, the MCA program makes no adjustment for measurement errors, and thus falls short of fully controlling those dimensions which have been included in the equation.

LISREL Results Controlling GPA and Earlier Drug Use

Our LISREL analysis strategy deals with each of the three problems of insufficient controls mentioned above: it treats high school grade point average as causally prior to senior year hours of work; it includes measures of prior drug use as predictors; and it incorporates adjustments for measurement errors. But the LISREL analyses also involve greater risks that we have "overcontrolled"—particularly by including as exogenous variables the measures of grade at first use of various drugs. For example, large proportions of seniors have never used marijuana, and for all of them the answer to the grade at first use question ("never") is a perfect match to the answer to the current use question ("not at all"). Similarly, although most seniors have tried cigarettes, most were never daily smokers and most report no cigarette use at all in the past thirty days. So for those with no experience with daily cigarette use, or with marijuana use, it could be argued that the age/grade of onset measure is in some sense "confounded" with the corresponding measure of current use. For this and other reasons, we would much prefer true panel data spanning the high school years, with drug use measures obtained several years prior to senior year.

Given the present Monitoring the Future dataset, however, the retrospective accounts of age/grade of first use provided our best opportunity for a first approximation of what true panel data might reveal. In any case, the LISREL results are dramatic: the age/grade of onset measures treated as exogenous variables "explain" substantial amounts of the variance in current drug use, and hours of work (and also earnings) add nothing or virtually nothing in the way of additional explained variance.

The most serious limitation in these LISREL analyses is not, in our view, the possibility that we have overcontrolled earlier drug use.[1] Rather, the real problem lies in our lack of measures and resultant inability to control for some other highly relevant dimensions of earlier experience: hours of part-time work (and earnings) during earlier grades. When we control earlier drug use we are able to provide at least an approximate answer to the question: Do

[1]We note, in this connection, that the LISREL path coefficients from age/grade of onset to current use are distinctly lower than the one- and two-year stability estimates for drug use during the first years after high school.

senior-year hours of part-time work have an impact on changes in drug use—i.e., on senior-year drug use above and beyond that predictable from earlier drug use? That is an interesting and important question, to which our answer is largely negative. However, we must keep in mind that another even more important question has been left unanswered: To what extent does part-time work in earlier grades influence contemporaneous and subsequent drug use?

Earnings as a Factor Linking Hours of Work to Drug Use

We return now to the simpler LISREL analyses, Pattern A, which treated only GPA as an exogenous variable, and which focused primarily on the question of whether hours of work per week may affect drug use directly and/or indirectly via weekly earnings. At first blush these analyses may seem to be of little interest, given that the addition of the early drug use measures in Pattern B largely "washed out" the Pattern A effects. But as suggested in the previous section, the pattern B analyses are misspecified ("unbalanced," in effect) because they include controls for earlier drug use but none for earlier part-time work. The Pattern A analyses, on the other hand, present what may be a more balanced picture of the relationship which has evolved between work and drug use during the high school years.

The Pattern A LISREL results suggest that to the extent that hours of part-time work have impacts on smoking, drinking, and marijuana use, those effects among males are mostly direct, whereas among females they are mostly indirect via earnings. For cocaine use, however, any effects among both males and females appear to be mostly indirect via earnings.

The finding that cocaine use is directly linked to income is quite plausible, given the high cost of cocaine. Less easily explained are the sex differences—the findings that smoking, drinking, and marijuana use are more directly linked to income among females than among males. One possibility, which is not readily explored with the present dataset, is that those females whose part-time work is relatively low paying baby-sitting may be less likely to be involved in drug use.

In any case, the Pattern A LISREL findings provide at least some support for the notion that long hours of part-time work may contribute to drug use among students simply by providing them with more spending money. Other analyses of Monitoring the Future samples (Bachman, 1983) have shown that relatively small portions of high school seniors' earnings are set aside for college or other long-range saving; instead, the largest category is so-called "discretionary" spending. Most students working long hours are thus not working to build a future through education or to contribute to family finances. Rather, it appears that their earnings are devoted primarily to supporting their current lifestyles. It has been argued elsewhere that a variety of problems and risks may be associated with such "premature affluence" (Bachman, 1983). The present analyses provide some additional evidence that drug use may be among these problems.

Work Intensity as Part of a Syndrome

If we focus especially on drug use and other problem behaviors, the bivariate data clearly show positive correlations with work intensity, but we have seen that these correlations are at least partly attributable to prior differences in background characteristics and educational success; such findings are also consistent with recent longitudinal evidence from Mortimer and her colleagues concerning selection effects (e.g., Mortimer et al., 1991). We think it may be useful to interpret this set of findings as reflecting a syndrome of behaviors which are interrelated and at least to some extent mutually reinforcing. Working long hours is not the first of such behaviors to emerge, by any means. An early indicator in some cases is that a student is held back a grade in school. Poor grades in general can also be an early indicator. Early initial use of cigarettes and alcohol, as well as marijuana and other illicit drugs, are yet other factors in the syndrome. In many (but not all) cases, it seems appropriate to treat long hours of part-time work as a part of such a syndrome of "problem behaviors" (Jessor & Jessor, 1977) or "precocious development" (Newcomb & Bentler, 1988). Thus construed, heavy time commitment to employment can be seen as an important symptom of a potentially wide range of psychosocial difficulties.

According to Jessor and Jessor (1977), an important component of the problem behavior syndrome is transition proneness, a form of "pseudomaturity" in which individuals engage in adult-like behaviors before they have the requisite perspectives and responsibilities that typically come with adulthood. This notion of pseudomaturity also is in accord with Greenberger and Steinberg's (1986) concern that long hours of work move one toward a "pseudo-adulthood." But rather than viewing work intensity as part of an exclusively negative syndrome, we prefer the somewhat broader concept of precocious development as described by Newcomb and Bentler (1988): "the syndrome of behaviors underlying precocious development may be both positively and negatively valued and are not uniformly seen as problems or deviant" (p. 39). Thus, those working long hours may be anticipating and experiencing a quicker transition to young adulthood than their agemates working fewer hours. In particular, those not anticipating college attendance are likely to work long hours, suggesting that for many of them the "worker role" is already more dominant than the "student role." It is not difficult to envision that from the perspective of the non-college bound senior, long hours on the job may be viewed as quite functional (cf. Stern & Nakata, 1989).

None of this suggests to us that precocious development, as a syndrome, is developmentally optimal. Indeed, as Newcomb and Bentler (1988) indicate, an underlying theme of precocious development is the inability to delay gratification. Consistent with Jessor and Jessor's (1977) notion of transition proneness, Newcomb and Bentler state that "there may be a strong drive and need to grow up quickly and enjoy the positive aspects of adulthood, without waiting until this would naturally occur. As a result, the rewarding aspects of adulthood are sought and coveted (i.e., drug use, autonomy, sexual involvement), while avoiding the more difficult tasks of adulthood that would be gained with experience and maturity (e.g., responsibility, forethought)" (p. 37-38). Clearly, the notion of premature affluence (Bachman, 1983a) could also be seen as reflecting this inability to delay gratification; accordingly, to the

extent that working long hours exacerbates this tendency by providing an easy means to conspicuous consumption, work intensity might contribute further to the precocious development syndrome. Nevertheless, it seems to us that part-time work, and especially high work intensity, occur relatively late in the syndrome, thus suggesting that work intensity is perhaps more a symptom than a cause of various psychosocial difficulties.

Social Policy Issues and Implications

There has been a good deal of controversy concerning the possible advantages and disadvantages of part-time work among adolescents (see, e.g., Greenberger & Steinberg, 1986; Mortimer et al., 1992 a,b; Steinberg & Dornbusch, 1991; Stern & Nakata, 1989). The controversy centers less upon the correlational findings themselves, and more upon interpretations and policy recommendations. But even with respect to policy implications, there may be large areas of agreement. We begin by stressing those.

First, given the typical work experiences of high school seniors, we think that most observers would agree that those students who do not choose to work long hours are generally better off than those who do.[2] Given the evidence suggesting that educational success predisposes students to avoid excessive involvement in part-time work, we feel confident that most observers would support early academic development and intervention efforts as an action step (of course, there are already many other important reasons for supporting such efforts to strengthen early academic success).

Second, it also seems safe to say that most observers would support efforts toward making the present array of part-time jobs more educationally useful—particularly in terms of preparation for future employment experiences. Greenberger and Steinberg (1986, pp. 227-30) offer a number of practical suggestions as to how employers might "optimize adolescents' work environments"; in addition to limiting hours of employment, they suggest greater variety in activities (e.g., job rotation) and greater amounts of cross-age contact (e.g., older adults as mentors or role models). They also encourage schools to "integrate adolescents' work experience into school activities" (pp. 230-33), including the idea of schools developing standard checklists for supervisors to use in rating their student employees, and then maintaining files of such ratings that could be used by the students as an additional "credential" even after they graduate (see also Bachman, 1983b; Hamilton, 1990). Hamilton (1990) calls for more comprehensive changes in at least some youth jobs; his proposed "Americanized" version of the German apprenticeship system would result in worthwhile work experiences during adolescence, as well as smoother transitions into adult employment.

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[2]Most seniors work in jobs which they describe as not being acceptable work "for most of their lives"—rather, they characterize their jobs as the sort of thing people do "just for the money" (Bachman, et al., 1986). Important exceptions are many work-study jobs, which generally involve school programs designed to integrate school and work in order to improve the later transition from school to work. Students working long hours in such jobs may be doing so for somewhat different reasons than students with long hours in the more typical part-time job, and the impacts of such employment experiences are likely also to be different.

But job improvement will take time and effort, and increasing early educational successes will take even more; in the meantime, the question remains as to how society should deal with those students who, for good reasons or poor, want to be employed—often for long hours. Steinberg and Dornbusch suggest that ". . . parents, educational practitioners, and policymakers should continue to monitor the number of weekly hours that adolescents work during the school year" (1991, p. 313). But the question remains, what should follow from the monitoring? Specifically, if some students wish to commit themselves more heavily to part-time work, should parents and policymakers treat such employment opportunities as troublesome distractors or as potentially valuable alternatives? Posing the question in this form helps to illustrate the important conceptual and policy implications of this issue (cf. Yasuda, 1990). On the one hand, fairly well-ingrained dissatisfactions with school may push some students out of full-time involvement in school, making greater involvement in work a convenient (and acceptable) way of filling the vacuum, and perhaps providing an alternative basis for feelings of self-worth. Indeed this compensatory phenomenon may underlie our findings (see also Bachman et al., 1986), and those of others (e.g., Steinberg & Dornbusch, 1991), that self-esteem is practically unrelated to hours of work. Put differently, in the absence of work the self-esteem of some students might suffer. If work does provide a way for some to make up for their poor student performance, then withholding (or strictly limiting) work is unlikely to result in improved well-being or adjustment to school. On the other hand, less fundamental dissatisfactions with school may simply leave other students more vulnerable to the attractions of quick earnings and "premature affluence"—in other words, those not strongly committed to the delay in gratification that educational success generally involves may find themselves seduced by the typical teenage pattern of "earn and spend" (rather than "earn and save/invest in the future"). Among these individuals, perhaps hours of part-time work should be more closely monitored and limited.

When exploring the various linkages between work intensity and educational success/failure, it may be useful to consider some connections and parallels between working long hours and actually dropping out of high school. Of course, some students work long hours and subsequently become dropouts (although not necessarily as a direct consequence). But we suspect that for other students a heavy investment in part-time work really amounts to a partial dropping out, with proportionately lower costs and risks. Long hours at work can help them justify a reduced investment of time and effort in a school setting which for them may be fraught with failure, frustration, and consequent risks to self-esteem. For such individuals the job also provides a setting in which their efforts obviously are valued in at least one way: they earn sizeable incomes which often are used to support highly conspicuous consumption in the form of cars, clothing, stereo equipment, etc. (Bachman, 1983a). Moreover, this substitution of work investment in place of school investment avoids the social stigma and loss of credential which would result from a complete dropping out.

A related parallel between dropping out and long hours pertains to prevention. Three decades ago, when the Kennedy and Johnson administrations focused attention on the drop-out issue, the goal often seemed to be simply "to hold our young people in school" or "to get them back into school" (see Bachman, Green, & Wirtanen, 1971, pp. 1-3 for examples). Even when improvement in schooling or attitudes about school were mentioned, it was often just as an

instrument for reducing the dropout rate; e.g., "...we must stimulate interest in learning in order to reduce the alarming number of students who now drop out of school..." (Kennedy, 1962). More recently there has been increased recognition that dropping out is symptomatic of scholastic failure and/or alienation from school, and that in order to have more students complete high school in a productive manner, the needs are for early intervention, positive school climates, high expectations, thorough development of basic skills, and the like (Goertz, Ekstrom, & Rock, 1991; see also Bachman, O'Malley, & Johnston, 1978). A parallel argument would be that the best way to avoid students working long hours in part-time jobs would be to improve their interest in and commitment to school, so that they would not wish to over-invest in work at the possible expense of their schooling.

Finally, it is worthwhile to consider what would happen to some marginal students if part-time work hours were more severely controlled and limited. How many marginal students would be encouraged to spend more time and effort in school? How many others would be pushed into dropping out completely? Surely there would be some of each; the problem is in estimating which outcome would be the more dominant one. In any event, this helps illustrate our preference for a "demand reduction strategy" which seeks ways to reduce students' desires for long hours of work, in contrast to any "supply reduction strategy" which would simply place legal or quasi-legal constraints on the hours students can work.

Another Look at the "Work Experience Bandwagon"

A decade ago, in a provocative article entitled "Jumping off the work experience band wagon," Steinberg (1982) challenged the then-conventional wisdom about the benefits of part-time work during adolescence. In their more extensive summary of evidence, Greenberger and Steinberg (1986) stated the following conclusion about that conventional wisdom: "The belief that work—under virtually all circumstances—is 'good' for young people, and a good deal of work even better, is deeply entrenched. For this reason it is not easy to win a hearing for our argument that the benefits of extensive school-year employment have been overestimated and the costs, underestimated" (p. 236). Easy or not, it seems safe to say that by now they have succeeded in winning a hearing for the argument; indeed, we think it is fair to say that many scientists and practitioners concerned with adolescents have taken a cue from Greenberger, Steinberg, and colleagues and have jumped off the work experience bandwagon—we certainly did (e.g., Bachman, 1983a; Bachman et al., 1986; Vondracek & Schulenberg, 1984).

Now, however, we wonder whether the bandwagon is rolling in the opposite direction. In their summary of findings, Greenberger and Steinberg (1986) stressed that there are both positive and negative sides of the ledger when it comes to school-year employment, and they seemed quite willing to draw the conclusion that the work experiences cause various consequences; most notably, they asserted that extensive work involvement "...takes a toll on young people's education..." and "...leads to increased use of alcohol and marijuana, especially when jobs are stressful" (p. 237). In their recent report based on cross-sectional data, Steinberg and Dornbusch (1991) were careful to avoid explicit causal terminology, and they acknowledged the possibility that their findings regarding the negative correlates of work intensity might

"...reflect differential selection into the workplace" (p. 311). Nevertheless, they did state that "...the most prudent interpretation of these data, therefore, suggests simply that the potential risks of part-time employment during the school year increase with increasing time commitments to a job" (p. 310). We suspect that many parents, practitioners, and policymakers are likely to read such statements as indicating that hours of work should be limited. And, of course, many such readers have already found that notion stated more strongly and explicitly by Greenberger and Steinberg: "...it appears to be the case that formal and informal measures are still needed in order to keep a cap on the numbers of hours that youngsters work. Without such restrictions, many will continue to work more hours than is likely to be good for them" (1986, pp. 226-27). Before any such bandwagon, reflecting a new conventional wisdom, gathers much momentum, we would like to step off and offer a word or two of caution.

Conclusions

We agree with Greenberger, Steinberg, and others that for quite some time there has been a large discrepancy between the idealized notions about employment being good for adolescents, versus the job experiences actually available. We are also convinced that work intensity among contemporary high school students is correlated with many potentially detrimental behaviors—indeed, our own analyses reported here clearly indicate that most of the correlates of work intensity are undesirable. Our own interpretation is that work intensity can be closely linked to a more general syndrome of precocious development, much of which predates extensive part-time employment during the school year. Thus, in our view, work intensity may be as much (or more) a symptom, rather than a cause, of psychosocial difficulties more generally.

In addition to that general conclusion, we also draw several finer-grained distinctions. One such distinction is that different correlates of work intensity may involve different causal patterns. Another distinction is that not all teenage jobs are as limited and limiting as are the typical teenage jobs. Finally, we stress that the mix of job experiences presently available to adolescents is something that could be changed, given concerted action by parents, educators, enlightened employers, and policymakers. Like Greenberger and Steinberg (1986, pp. 207-42), we think it is possible to improve the adolescent work experience, and that one of the ways (albeit a difficult one) is to try to improve the actual content of youth jobs.

We believe that there currently exists enough variability along several important dimensions to assume that some part-time work experiences are, in balance, developmentally beneficial for certain adolescents. What characterizes these jobs, these young people, and the interaction between the two? We see such questions as particularly promising for future research, especially given the likelihood that whatever the conventional wisdom, school-year employment is likely to remain an important part in the life of many, if not most, adolescents. With that in mind, we consider again the notion that part-time work has the potential to facilitate the transition from school to work. Perhaps that is an idea whose time has come, and gone, and now should come back again—albeit with far more careful and critical scrutiny than the first time.

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TABLES AND FIGURES

Table 1
Work Status Predicted from Background and Educational Success:
Multiple Classification Analyses of Males and Females in
the Classes of 1985-1989

Predictor	Males							Females						
		Not Working		Working		Volunteer			Not Working		Working		Volunteer	
	n	%	Adj	%	Adj	%	Adj	n	%	Adj	%	Adj	%	Adj
Base year														
1985	6,437	21	21.1	71	70.5	8	8.3	7,257	25	24.8	67	67.1	8	8.1
1986	6,141	21	21.0	72	71.8	7	7.2	6,925	23	22.8	69	69.1	8	8.1
1987	6,647	20	20.4	73	72.5	7	7.1	7,429	22	22.5	71	70.9	7	6.6
1988	6,938	19	18.4	74	74.3	7	7.4	7,339	21	21.0	71	71.9	7	7.1
1989	7,176	20	19.9	74	74.1	6	6.0	7,328	21	20.5	72	72.4	7	7.0
Eta		.017		.023		.028			.030		.038		.024	
Beta			.025		.032		.028			.036		.043		.023
Race														
Black	3,306	33	33.9	60	59.2	6	6.8	4,317	37	35.3	55	56.5	8	8.2
White	25,816	18	17.5	75	75.5	7	7.0	27,891	19	19.1	74	73.9	7	7.0
Hispanic	1,965	25	26.3	67	64.9	8	8.9	2,000	32	32.3	60	59.2	8	8.4
Other	2,252	26	26.4	65	65.0	8	8.6	2,070	29	29.8	61	59.9	10	10.3
Eta		.123		.112		.020			.156		.153		.030	
Beta			.132		.124		.022			.143		.146		.034
Parent Ed														
Low	3,072	21	20.1	71	72.0	8	7.9	3,970	30	24.7	62	67.7	8	7.6
Medium	18,584	18	18.9	75	74.0	7	7.1	20,409	21	21.3	72	71.6	7	7.1
High	11,683	23	22.2	69	70.6	7	7.2	11,899	22	23.3	71	68.9	8	7.8
Eta		.058		.058		.015			.066		.067		.014	
Beta			.038		.036		.010			.030		.034		.012
Region														
South	9,807	22	21.7	70	70.6	8	7.7	11,524	30	27.9	62	64.3	8	7.8
NE	7,524	20	19.9	75	74.3	5	5.8	7,346	18	18.9	76	75.0	6	6.1
NC	9,282	18	19.3	74	73.4	7	7.3	10,506	19	19.9	74	73.1	7	7.0
West	6,726	19	19.1	73	73.2	8	7.7	6,902	19	19.6	72	71.9	9	8.6
Eta		.042		.048		.035			.125		.129		.040	
Beta			.027		.033		.029			.095		.095		.031

Table 1, cont.

Predictor	Males							Females						
		Not Working		Working		Volunteer			Not Working		Working		Volunteer	
	n	%	Adj	%	Adj	%	Adj	n	%	Adj	%	Adj	%	Adj
Urbanicity														
Farm	903	12	15.3	75	70.8	14	13.9	856	25	26.3	62	60.1	13	13.6
Country	1,496	19	21.7	71	68.8	9	9.5	1,630	28	27.7	61	61.8	10	10.5
NonSMSA	4,898	23	24.0	68	66.9	9	9.1	5,383	25	25.2	66	66.4	8	8.4
None S-R	15,976	20	19.5	74	74.3	6	6.2	17,731	21	21.1	72	71.9	7	7.0
Self-Rep	10,066	20	19.0	74	74.9	6	6.2	10,678	20	20.7	74	73.4	6	5.9
Eta		.053		.052		.070			.055		.082		.063	
Beta			.051		.069		.073			.054		.082		.063
College Plans														
No	10,285	15	17.4	78	76.6	6	6.0	10,915	23	22.2	70	70.3	7	7.5
Yes	23,054	23	21.5	70	70.7	8	7.8	25,363	22	22.4	71	70.3	7	7.3
Eta		.084		.091		.026			.009		.008		.000	
Beta			.048		.062		.033			.002		.001		.004
Grades														
D C-	2,093	22	23.2	73	70.5	6	6.4	1,261	28	27.5	64	64.6	8	7.8
C- C+	8,734	18	19.2	75	73.8	7	7.1	6,741	25	24.6	68	68.8	7	6.7
B	16,959	19	18.8	74	74.4	7	6.8	20,012	21	21.2	72	71.5	7	7.3
A	5,553	26	24.5	64	66.5	9	9.0	8,264	22	22.4	69	69.5	8	8.1
Eta		.069		.084		.040			.048		.042		.024	
Beta			.056		.066		.032			.038		.035		.019
Curriculum														
Coll prep	17,622	23	21.9	70	70.9	8	7.3	20,094	21	22.8	71	69.5	8	7.7
General	11,707	19	19.7	74	73.3	7	7.0	12,687	24	22.9	69	70.1	7	7.1
Voc-Tech	4,010	13	14.9	81	77.9	7	7.2	3,497	21	18.0	73	75.3	7	6.7
Eta		.086		.084		.014			.033		.029		.010	
Beta			.057		.052		.004			.035		.037		.015
R^2		.035		.037		.010			.042		.047		.007	
R^2 (adj)		.034		.036		.009			.041		.046		.007	

Table 2
Hours Worked per Week, Pay per Week, and Pay per Hour Predicted from Background and Educational Success:
Multiple Classification Analyses Of Employed Males in the Classes of 1985-1989

Predictor		Hours work per week			Pay per week (in dollars)			Pay per hour (in dollars)		
	n	x	(x adj)	sd	x	(x adj)	sd	x	(x adj)	sd
Base year										
1985	4,639	19.29	19.11	9.28	70.67	69.94	43.01	4.13	4.12	4.15
1986	4,446	19.30	19.31	9.30	71.39	71.73	43.18	4.33	4.36	4.71
1987	4,843	19.14	19.12	9.20	73.80	73.74	43.48	4.54	4.55	4.84
1988	5,197	19.38	19.47	9.01	75.10	75.18	43.15	4.42	4.41	4.06
1989	5,375	19.44	19.53	8.96	76.22	76.56	43.23	4.43	4.43	3.80
Eta		.011			.049			.031		
Beta			.019			.055			.032	
Race										
Black	2,007	19.91	19.10	9.52	81.08	77.87	45.79	5.37	5.37	6.74
White	19,665	19.23	19.38	9.03	72.37	73.17	42.59	4.22	4.25	3.86
Hispanic	1,356	19.89	18.92	9.70	78.00	72.50	45.55	4.82	4.59	5.27
Other	1,472	19.09	19.02	9.55	75.52	73.76	45.43	4.75	4.63	5.04
Eta		.025			.060			.078		
Beta			.016			.029			.072	
Parent Ed										
Low	2,190	20.65	19.75	9.69	75.93	72.57	44.61	4.55	4.45	5.40
Medium	13,966	20.20	19.90	9.02	76.08	75.26	43.15	4.29	4.31	4.25
High	8,314	17.29	18.10	8.87	68.15	70.65	42.56	4.47	4.47	4.07
Eta		.152			.085			.023		
Beta			.091			.049			.018	
Region										
South	6,846	19.77	19.60	9.37	73.36	73.30	43.20	4.29	4.27	4.14
NE	5,717	19.48	19.60	8.82	78.94	78.33	42.84	4.66	4.61	4.48
NC	7,035	18.85	18.83	9.04	67.94	68.29	41.86	4.06	4.12	3.99
West	4,902	19.07	19.24	9.25	75.91	76.18	44.87	4.66	4.66	4.82
Eta		.041			.094			.058		
Beta			.037			.087			.052	
Urbanicity										
Farm	682	21.02	19.70	9.75	69.30	66.07	47.49	3.69	3.81	3.71
Country	1,076	19.04	18.02	9.82	66.30	63.58	44.31	4.03	4.11	4.40
NonSMSA	3,391	18.60	18.31	9.42	64.04	63.89	41.72	3.97	4.06	4.42
Non S-R	11,860	19.46	19.65	9.09	74.99	75.46	43.01	4.43	4.41	4.33
Self-Rep	6,069	19.27	19.56	8.74	79.29	79.66	42.46	4.73	4.66	4.26
Eta		.051			.122			.066		
Beta			.064			.136			..054	

Table 2, cont.

Predictor	n	Hours work per week x	Hours work per week (x adj)	Hours work per week sd	Pay per week (in dollars) x	Pay per week (in dollars) (x adj)	Pay per week (in dollars) sd	Pay per hour (in dollars) x	Pay per hour (in dollars) (x adj)	Pay per hour (in dollars) sd
College Plans										
No	8,076	21.60	20.42	9.12	81.11	78.07	44.78	4.36	4.40	4.64
Yes	16,424	18.03	18.69	8.90	69.30	71.00	41.79	4.38	4.36	4.13
Eta		.187			.131			.003		
Beta			.091			.078			.005	
Grades										
D C-	1,524	20.86	19.62	9.09	78.47	73.42	44.62	4.43	4.34	4.76
C- C+	6,577	20.65	19.88	8.96	78.62	75.32	43.65	4.41	4.35	4.54
B	12,726	19.31	19.49	9.02	73.50	74.29	42.67	4.36	4.38	4.20
A	3,673	16.31	17.57	9.18	62.63	67.76	42.04	4.35	4.43	4.15
Eta		.154			.118			.007		
Beta			.082			.057			.006	
Curriculum										
Coll prep	12,574	17.51	18.32	8.75	67.06	69.10	40.90	4.34	4.31	4.05
General	8,680	20.56	19.94	9.17	78.08	76.40	44.23	4.37	4.38	4.38
Voc-Tech	3,246	22.11	20.99	9.11	83.37	80.90	45.01	4.48	4.56	4.99
Eta		.199			.150			.011		
Beta			.112			.105			.020	
R^2			.069			.065			.014	
R^2 (adj)			.068			.0641			.013	

Table 3
Hours Worked per Week, Pay per Week, and ay per Hour Predicted from Background and Educational Success:
Multiple Classification Analyses of Employed Females in the Classes of 1985-1989

Predictor		Hours work per week			Pay per week			Pay per hour		
	n	x	(x adj)	sd	x	(x adj)	sd	x	(x adj)	sd
Base year										
1985	4,983	17.65	17.65	8.57	57.31	57.54	37.06	3.57	3.59	3.32
1986	4,853	17.81	17.77	8.44	59.56	59.75	36.85	3.67	3.70	3.23
1987	5,397	18.31	18.26	8.46	63.42	63.17	38.27	3.77	3.77	3.02
1988	5,349	17.97	18.02	8.35	63.68	63.66	39.29	3.91	3.89	3.44
1989	5,355	18.23	18.27	8.37	66.31	66.22	39.57	4.12	4.10	3.95
Eta		.029			.083			.057		
Beta			.030			.079			.052	
Race										
Black	2,393	19.02	18.34	9.24	77.49	73.67	43.24	5.37	5.24	6.46
White	21,020	17.86	18.02	8.25	59.86	60.82	37.00	3.56	3.60	2.60
Hispanic	1,223	18.48	17.23	9.03	72.44	65.44	42.12	4.87	4.59	5.39
Other	1,301	18.17	17.92	9.17	63.95	61.86	40.37	4.20	4.09	4.05
Eta		.041			.143			.167		
Beta			.024			.096			.145	
Parent Ed										
Low	2,490	19.62	19.04	9.10	70.60	66.65	41.87	4.46	4.15	5.46
Medium	14,883	18.65	18.50	8.29	63.95	63.57	38.05	3.75	3.75	3.26
High	8,564	16.27	16.75	8.19	56.29	58.28	37.06	3.73	3.83	2.76
Eta		.143			.116			.063		
Beta			.103			.073			.034	
Region										
South	7,305	18.19	18.06	8.77	63.59	62.71	39.26	3.95	3.83	3.87
NE	5,671	17.87	17.88	8.16	65.27	64.65	38.11	4.06	4.04	3.51
NC	7,970	17.75	17.78	8.17	57.73	58.65	36.42	3.52	3.62	3.04
West	4,991	18.29	18.43	8.62	63.60	64.27	39.89	3.80	3.85	3.08
Eta		.026			.078			.062		
Beta			.027			.063			.044	
Urbanicity										
Farm	527	17.89	17.42	8.98	51.23	51.41	37.58	3.07	3.25	2.74
Country	994	17.47	17.00	9.16	54.61	53.75	37.34	3.53	3.58	4.03
NonSMSA	3,657	17.48	17.36	8.65	54.01	54.51	35.22	3.40	3.50	2.91
Non S-R	12,829	18.21	18.27	8.37	63.71	63.74	38.66	3.84	3.84	3.37
Self-Rep	7,930	18.07	18.18	8.19	67.23	67.03	38.91	4.16	4.09	3.68
Eta		.034			.131			.083		
Beta			.049			.128			.065	

Table 3 cont.

Predictor	n	Hours work per week x	Hours work per week (x adj)	Hours work per week sd	Pay per week x	Pay per week (x adj)	Pay per week sd	Pay per hour x	Pay per hour (x adj)	Pay per hour sd
College Plans										
No	7,721	19.66	18.67	8.56	67.96	64.60	39.86	3.97	3.91	4.22
Yes	18,216	17.24	17.70	8.27	59.57	61.12	37.43	3.75	3.78	2.97
Eta		.134			.102			.030		
Beta			.054			.042			.018	
Grades										
D C-	812	19.91	18.80	8.93	68.13	62.49	41.54	4.00	3.73	4.47
C- C+	4,643	19.28	18.54	8.48	67.74	63.65	40.00	4.08	3.88	4.38
B	14,645	18.23	18.23	8.27	63.22	63.11	37.94	3.80	3.80	3.18
A	5,837	16.25	16.97	8.45	54.94	58.99	36.82	3.64	3.83	2.95
Eta		.127			.115			.042		
Beta			.070			.047			.010	
Curriculum										
Coll prep	14,547	16.79	17.33	8.11	56.98	58.78	35.86	3.65	3.72	2.73
General	8,827	19.17	18.58	8.54	66.82	65.04	39.79	3.93	3.88	3.77
Vo-Tech	2,563	20.38	19.60	8.71	74.06	70.65	41.81	4.32	4.12	4.97
Eta		.162			.159			.062		
Beta			.095			.107			.037	
R^2			.049			.076			.040	
R^2 (adj)			.048			.075			.039	

Table 4
Prevalence of Daily Cigarette Use Predicted by Hours of Work, Background, and Educational Success: Multiple Classification Analyses of Males and Females in the Classes of 1985-1989

Predictor	Males Daily cigarette use				Females Daily cigarette use			
	n	x	(x adj)	sd	n	x	(x adj)	sd
Base year								
1985	6328	16.93	16.37	37.51	7160	19.86	19.60	39.90
1986	6039	16.20	15.51	36.84	6840	19.72	18.92	39.79
1987	6545	15.78	15.89	36.46	7347	20.15	19.82	40.12
1988	6832	17.08	17.65	37.63	7244	17.95	18.48	38.38
1989	7048	17.41	17.88	37.92	7222	19.07	19.86	39.29
Eta		.016				.020		
Beta			.025				.014	
Race								
Black	3175	7.73	5.49	26.71	4172	6.74	4.18	25.07
White	25485	18.06	18.22	38.47	27643	21.84	22.20	41.32
Hispanic	1919	11.70	11.46	32.15	1961	9.81	9.13	29.75
Other	2213	17.14	18.49	37.69	2037	19.09	19.73	39.31
Eta		.086				.133		
Beta			.104				.155	
College Plans								
Definit won't	5215	30.93	25.80	46.23	5852	32.40	27.19	46.81
Probable won't	4858	22.38	19.09	41.69	4877	26.28	23.19	44.02
Probable will	8138	14.73	15.12	35.44	7436	18.81	18.76	39.08
Definit will	14581	9.93	13.01	29.91	17648	12.69	15.55	33.28
Eta		.208				.193		
Beta			.125				.113	
Region								
South	9641	16.02	16.37	36.68	11338	15.87	18.11	36.54
NE	7392	17.94	18.29	38.37	7248	26.94	26.19	44.37
NC	9148	19.34	18.61	39.50	10402	21.32	19.85	40.96
West	6611	12.57	12.64	33.15	6825	14.11	13.12	34.81
Eta		.064				.118		
Beta			.058				.105	
Urbanicity								
Farm	886	18.87	14.08	39.15	850	16.86	15.62	37.46
Country	1479	18.96	16.44	39.21	1608	18.45	16.50	38.80
NonSMSA	4846	18.85	18.36	39.11	5319	18.92	18.37	39.17
NonS-R	15711	15.88	16.46	36.55	17516	18.52	19.37	38.85
Self-Rep	9870	15.80	16.44	36.48	10520	21.71	21.11	41.23
Eta		.036				.036		
Beta			.024				.035	

Table 4, cont.

Predictor	Males Daily cigarette use n	x	(x adj)	sd	Females Daily cigarette use n	x	(x adj)	sd
Parent Ed								
Low	2999	20.04	17.22	40.04	3894	19.41	17.56	39.55
2	9281	18.89	15.19	39.14	10238	22.52	19.04	41.77
3	8996	16.50	16.60	37.12	9913	19.09	19.52	39.30
4	7535	13.94	17.23	34.64	7754	17.48	20.12	37.98
High	3981	13.89	19.32	34.59	4014	14.61	20.12	35.33
Eta		.061				.063		
Beta			.033				.019	
Curriculum								
Coll prep	17396	10.68	14.45	30.89	19900	13.60	16.44	34.28
General	11473	21.21	18.09	40.88	12478	25.63	22.41	43.66
Voc-Tech	3923	27.40	21.44	44.61	3435	27.88	24.04	44.85
Eta		.172				.159		
Beta			.067				.081	
Grades								
D, C-	2048	34.45	30.17	47.53	1245	39.14	34.86	48.83
C, C+	8557	23.08	20.99	42.14	6631	28.22	25.91	45.01
B-, B	12021	15.50	15.46	36.19	12998	21.50	20.76	41.08
B+, A-	7718	10.62	12.80	30.81	11307	13.78	15.16	34.47
A	2448	5.75	9.57	23.29	3632	7.57	11.14	26.46
Eta		.186				.185		
Beta			.131				.137	
Hours work per week								
Don't work	6487	11.53	13.65	31.94	7680	15.43	17.09	36.12
5 or less	2127	11.30	13.26	31.66	2156	12.52	14.94	33.10
6-10	2577	12.67	13.75	33.27	2961	14.03	15.28	34.73
11-15	3206	13.84	14.71	34.54	4261	16.70	16.66	37.30
16-20	5226	17.15	16.98	37.70	6518	22.40	21.48	41.70
21-25	4517	20.06	19.01	40.05	4820	24.71	22.85	43.14
26-30	3108	24.54	21.99	43.04	2688	25.60	23.55	43.65
31 or more	3354	25.21	21.55	43.43	2241	28.28	25.30	45.04
Don't work for money	2190	14.12	15.16	34.83	2488	16.27	17.98	36.92
Eta		.134				.123		
Beta			.084				.083	
R^2			.084				.103	
R^2(adj)			.083				.102	

Table 5
Prevalence of Half-Pack or More per Day Cigarette Use Predicted by Hours of Work, Background, and Educational Success: Multiple Classification Analyses of Males and Females in the Classes of 1985-1989

Predictor	Males n	Males x	Males 1/2 pack cigarette use (x adj)	Males sd	Females n	Females x	Females 1/2 pack cigarette use (x adj)	Females sd
Base year								
1985	6328	11.78	11.19	32.24	7160	11.45	11.17	31.84
1986	6039	10.00	9.41	30.00	6840	11.53	10.89	31.95
1987	6545	9.81	9.94	29.74	7347	12.07	11.84	32.58
1988	6832	11.09	11.62	31.41	7244	9.58	10.04	29.43
1989	7048	10.84	11.28	31.09	7222	10.34	10.96	30.45
Eta		.023				.029		
Beta			.027				.019	
Race								
Black	3175	3.26	1.21	17.76	4172	2.01	-0.09	14.03
White	25485	11.97	12.19	32.46	27643	12.75	13.12	33.35
Hispanic	1919	5.30	4.61	22.41	1961	3.29	2.11	17.83
Other	2213	10.78	11.57	31.02	2037	11.80	12.01	32.27
Eta		.091				.123		
Beta			.113				.148	
College Plans								
Definitely won't	5215	22.91	18.40	42.03	5852	21.23	16.87	40.90
Probably won't	4858	15.61	12.82	36.30	4877	16.52	13.89	37.14
Probably will	8138	8.69	9.20	28.17	7436	9.99	10.09	29.99
Definitely will	14581	5.10	7.68	22.01	17648	5.97	8.32	23.70
Eta		.214				.189		
Beta			.127				.105	
Region								
South	9641	10.19	10.43	30.25	11338	8.64	10.05	28.10
NE	7392	12.02	12.24	32.53	7248	16.64	16.14	37.24
NC	9148	12.76	12.13	33.37	10402	12.44	11.46	33.01
West	6611	7.13	7.40	25.73	6825	6.64	6.15	24.90
Eta		.065				.112		
Beta			.057				.101	
Urbanicity								
Farm	886	12.18	7.68	32.72	850	9.30	7.82	29.07
Country	1479	12.93	10.41	33.56	1608	11.29	9.27	31.66
NonSMSA	4846	12.23	11.67	32.77	5319	11.15	10.59	31.48
NonS-R	15711	9.99	10.57	29.99	17516	9.99	10.74	29.99
Self-Rep	9870	10.23	10.86	30.31	10520	12.88	12.52	33.49
Eta		.034				.039		
Beta			.024				.035	

Table 5, cont.

Predictor	Males n	Males x	Males 1/2 pack cigarette use (x adj)	Males sd	Females n	Females x	Females 1/2 pack cigarette use (x adj)	Females sd
Parent Ed								
Low	2999	14.35	12.39	35.06	3894	13.25	11.91	33.90
2	9281	12.96	9.91	33.59	10238	13.54	10.93	34.22
3	8996	10.58	10.71	30.76	9913	10.33	10.70	30.44
4	7535	7.79	10.44	26.80	7754	8.79	10.78	28.31
High	3981	7.71	11.89	26.69	4014	7.26	11.19	25.95
Eta		.077				.072		
Beta			.026				.012	
Curriculum								
Coll prep	17396	5.66	8.77	23.11	19900	6.40	8.55	24.48
General	11473	14.39	11.89	35.10	12478	16.05	13.67	36.71
Voc-Tech	3923	20.04	14.92	40.03	3435	17.57	14.47	38.06
Eta		.176				.160		
Beta			.071				.085	
Grades								
D, C-	2048	25.33	21.46	43.50	1245	27.68	23.90	44.76
C, C+	8557	15.89	13.97	36.57	6631	17.34	15.32	37.87
B-, B	12021	9.17	9.16	28.86	12998	11.92	11.35	32.41
B+, A-	7718	5.99	7.96	23.73	11307	7.00	8.19	25.52
A	2448	3.85	7.29	19.24	3632	3.75	6.72	19.00
Eta		.176				.168		
Beta			.118				.117	
Hours work per week								
Don't work	6487	6.97	8.76	25.46	7680	8.43	9.52	27.79
5 or less	2127	5.93	7.52	23.62	2156	5.28	6.98	22.36
6-10	2577	7.11	7.99	25.70	2961	7.29	8.27	26.01
11-15	3206	7.03	7.79	25.57	4261	8.51	8.63	27.91
16-20	5226	10.72	10.60	30.94	6518	12.59	12.04	33.18
21-25	4517	13.25	12.38	33.91	4820	14.49	13.19	35.20
26-30	3108	17.18	15.02	37.73	2688	16.35	14.87	36.99
31 or more	3354	19.02	15.92	39.25	2241	18.83	16.45	39.10
Don't work for money	2190	8.87	9.71	28.44	2488	9.30	10.45	29.05
Eta		.141				.118		
Beta			.091				.082	
R^2		.087				.094		
R^2(adj)		.086				.093		

Table 6
Prevalence of Monthly Alcohol Use Predicted by Hours of Work, Background, and Educational Success: Multiple Classification Analyses of Males and Females in the Classes of 1985-1989

Predictor	Males 30 day alcohol use				Females 30 day alcohol use			
	n	x	(x adj)	sd	n	x	(x adj)	sd
Base year								
1985	6143	69.88	70.08	45.88	6952	63.12	63.42	48.25
1986	5919	69.35	68.89	46.11	6663	62.57	62.24	48.40
1987	6412	70.46	70.22	45.62	7173	63.66	63.01	48.10
1988	6664	68.53	68.70	46.44	7069	60.51	60.75	48.89
1989	6898	65.25	65.55	47.62	7006	55.81	56.22	49.67
Eta		.040				.059		
Beta			.037				.054	
Race								
Black	2981	49.34	48.92	50.00	3901	33.38	34.91	47.16
White	25116	72.05	71.86	44.88	27162	66.66	66.04	47.14
Hispanic	1830	63.62	65.55	48.12	1865	50.02	54.29	50.01
Other	2109	57.33	58.56	49.47	1935	46.42	48.06	49.88
Eta		.154				.229		
Beta			.151				.209	
College Plans								
Definitely won't	5015	72.72	69.52	44.55	5593	61.65	60.50	48.63
Probably won't	4716	71.09	68.74	45.34	4742	60.92	60.66	48.80
Probably will	7940	69.17	68.93	46.18	7217	61.03	60.90	48.77
Definitely will	14365	65.85	68.11	47.42	17311	60.95	61.50	48.79
Eta		.058				.005		
Beta			.011				.009	
Region								
South	9361	65.16	67.05	47.65	10950	53.58	57.88	49.87
NE	7253	70.74	69.96	45.50	7076	65.99	64.11	47.38
NC	8951	71.52	70.20	45.13	10153	66.57	64.14	47.18
West	6471	67.92	67.58	46.68	6684	60.68	58.77	48.85
Eta		.058				.116		
Beta			.031				.061	
Urbanicity								
Farm	849	69.14	67.42	46.22	827	54.71	54.97	49.81
Country	1423	67.24	66.65	46.95	1559	55.94	58.30	49.66
NonSMSA	4728	70.61	70.38	45.56	5185	61.89	62.12	48.57
NonS-R	15386	67.93	68.06	46.68	17075	61.49	61.50	48.66
Self-Rep	9650	68.93	69.27	46.28	10217	61.82	61.05	48.59
Eta		.022				.037		
Beta			.022				.029	

Table 6, cont.

Predictor	Males 30 day alcohol use n	x	(x adj)	sd	Females 30 day alcohol use n	x	(x adj)	sd
Parent Ed								
Low	2866	62.19	63.15	48.50	3697	49.42	53.95	50.00
2	8991	69.55	67.78	46.02	9918	60.40	59.67	48.91
3	8835	69.11	68.38	46.21	9699	62.13	61.44	48.51
4	7416	68.99	70.12	46.26	7620	64.78	63.85	47.77
High	3928	69.98	73.23	45.84	3929	65.35	66.22	47.59
Eta		.046				.093		
Beta			.053				.067	
Curriculum								
Coll prep	17163	66.50	68.04	47.20	19554	61.60	61.15	48.64
General	11115	70.34	68.92	45.68	12028	61.40	61.37	48.69
Voc-Tech	3758	72.47	70.29	44.67	3281	57.17	59.68	49.49
Eta		.050				.027		
Beta			.016				.010	
Grades								
D, C-	1989	76.45	77.47	42.44	1185	66.86	70.94	47.09
C, C+	8293	73.42	73.94	44.18	6363	64.94	67.73	47.72
B-, B	11790	70.26	69.83	45.71	12654	63.07	62.87	48.27
B+, A-	7575	63.67	63.52	48.10	11070	59.15	58.06	49.16
A	2389	54.37	54.42	49.82	3591	52.16	50.27	49.96
Eta		.122				.079		
Beta			.126				.108	
Hours work per week								
Don't work	6332	61.06	63.40	48.77	7424	51.65	55.00	49.98
5 or less	2067	65.42	66.06	47.57	2098	54.41	54.77	49.82
6-10	2512	66.53	67.10	47.20	2886	60.49	59.25	48.90
11-15	3152	68.80	68.47	46.34	4175	64.29	61.79	47.92
16-20	5139	72.15	70.92	44.83	6361	66.91	65.06	47.06
21-25	4410	72.96	71.57	44.42	4713	69.01	67.35	46.25
26-30	3028	71.47	70.48	45.16	2628	66.17	65.76	47.32
31 or more	3258	76.20	75.18	42.59	2156	64.31	65.45	47.92
Don't work for money	2138	64.51	65.27	47.86	2422	54.62	56.50	49.80
Eta		.108				.135		
Beta			.080				.099	
R^2			.054				.086	
R^2(adj)			.053				.085	

Table 7
Prevalence of Heavy Alcohol Use in the Past Two Weeks Predicted by Hours of Work, Background, and Educational Success: Multiple Classification Analyses of Males and Females in the Classes of 1985-1989

Predictor	Males 2 week heavy alcohol use				Females 2 week heavy alcohol use			
	n	x	(x adj)	sd	n	x	(x adj)	sd
Base year								
1985	6094	44.84	44.93	49.74	6940	28.42	28.48	45.11
1986	5855	46.02	45.31	49.85	6641	28.17	27.68	44.99
1987	6307	45.88	45.65	49.83	7175	29.29	28.92	45.51
1988	6599	43.36	43.81	49.56	7069	26.64	26.96	44.21
1989	6843	41.25	41.58	49.23	7030	25.48	25.92	43.58
Eta		.036				.031		
Beta			.030				.024	
Race								
Black	2957	23.22	22.26	42.23	3930	8.95	8.55	28.54
White	24832	47.56	47.43	49.94	27129	31.13	30.95	46.30
Hispanic	1805	42.39	43.91	49.43	1859	21.70	23.53	41.23
Other	2104	33.22	34.80	47.11	1937	19.29	20.78	39.47
Eta		.150				.163		
Beta			.151				.160	
College Plans								
Definitely won't	4902	52.80	47.91	49.93	5582	31.98	28.59	46.64
Probably won't	4603	48.42	44.62	49.98	4695	30.45	28.38	46.02
Probably will	7890	43.86	43.49	49.63	7230	27.83	27.50	44.82
Definitely will	14303	39.55	43.03	48.90	17348	25.06	27.01	43.34
Eta		.100				.062		
Beta			.035				.015	
Region								
South	9270	40.34	41.77	49.06	10983	22.28	24.95	41.61
NE	7165	44.29	44.39	49.68	7074	29.06	28.29	45.41
NC	8829	49.12	47.77	50.00	10124	34.04	32.50	47.39
West	6434	43.41	42.89	49.57	6674	25.53	23.92	43.61
Eta		.068				.106		
Beta			.048				.076	
Urbanicity								
Farm	835	48.59	45.16	50.01	828	25.67	24.74	43.71
Country	1410	42.89	41.51	49.51	1562	25.75	26.44	43.74
NonSMSA	4673	47.88	47.36	49.96	5191	28.40	28.24	45.10
NonS-R	15237	43.69	43.91	49.60	17050	27.85	28.10	44.83
Self-Rep	9543	42.25	43.09	49.40	10224	27.18	26.77	44.49
Eta		.042				.016		
Beta			.032				.019	

Table 7, cont.

Predictor	Males 2 week heavy alcohol use n	x	(x adj)	sd	Females 2 week heavy alcohol use n	x	(x adj)	sd
Parent Ed								
Low	2800	40.18	39.42	49.03	3679	23.20	24.47	42.22
2	8890	46.09	43.44	49.85	9918	28.65	27.07	45.21
3	8754	45.15	44.54	49.77	9689	27.63	27.38	44.72
4	7348	43.15	45.30	49.53	7622	28.61	29.09	45.20
High	3906	42.56	47.21	49.45	3947	27.04	29.78	44.42
Eta		.037				.037		
Beta			.039				.033	
Curriculum								
Coll prep	17080	39.80	42.37	48.95	19602	25.34	26.29	43.50
General	10930	48.21	45.92	49.97	11977	30.75	29.28	46.15
Voc-Tech	3688	50.84	46.90	50.00	3276	28.69	28.61	45.24
Eta		.093				.057		
Beta			.039				.032	
Grades								
D, C-	1936	55.57	54.67	49.70	1173	40.12	40.64	49.04
C, C+	8148	50.74	50.25	50.00	6344	33.10	33.66	47.06
B-, B	11698	45.70	45.35	49.82	12628	29.69	29.39	45.69
B+, A-	7528	37.49	38.25	48.41	11106	24.62	24.58	43.08
A	2388	27.76	29.40	44.79	3604	16.64	16.72	37.25
Eta		.144				.118		
Beta			.130				.120	
Hours work per week								
Don't work	6274	37.36	40.34	48.38	7438	22.32	24.51	41.64
5 or less	2047	40.30	41.47	49.06	2110	23.54	24.73	42.44
6-10	2497	40.89	41.74	49.17	2885	26.02	26.01	43.88
11-15	3131	43.94	44.11	49.64	4167	28.74	27.54	45.26
16-20	5079	46.16	45.02	49.86	6360	30.41	29.23	46.01
21-25	4380	47.49	45.88	49.94	4713	32.05	30.56	46.67
26-30	2986	49.15	47.26	50.00	2622	32.51	31.44	46.85
31 or more	3187	53.47	51.09	49.89	2142	33.27	32.66	47.13
Don't work for money	2117	40.78	41.57	49.15	2418	22.16	23.58	41.54
Eta		.102				.094		
Beta			.066				.065	
R^2		.061				.058		
R^2(adj)		.060				.057		

Table 8
Prevalence of Monthly Marijuana Use Predicted by Hours of Work, Background, and Educational Success: Multiple Classification Analyses of Males and Females in the Classes of 1985-1989

Predictor	Males 30 day marijuana use				Females 30 day marijuana use			
	n	x	(x adj)	sd	n	x	(x adj)	sd
Base year								
1985	6267	27.72	27.64	44.77	7097	22.11	22.20	41.50
1986	5998	26.14	25.82	43.94	6795	19.85	19.52	39.89
1987	6497	22.66	22.57	41.86	7294	18.53	18.16	38.86
1988	6774	20.27	20.47	40.21	7203	15.15	15.36	35.86
1989	7031	19.26	19.50	39.44	7213	13.92	14.29	34.62
Eta		.078				.079		
Beta			.074				.075	
Race								
Black	3141	17.37	15.92	37.89	4156	9.74	9.22	29.66
White	25350	24.22	24.45	42.84	27493	19.57	19.66	39.67
Hispanic	1905	21.64	21.05	41.19	1937	12.65	12.47	33.25
Other	2171	18.80	18.60	39.08	2016	14.93	14.88	35.65
Eta		.055				.089		
Beta			.066				.094	
College Plans								
Definitely won't	5145	28.76	25.75	45.27	5752	22.31	19.32	41.64
Probably won't	4814	27.65	25.53	44.73	4831	21.49	19.50	41.08
Probably will	8073	24.10	23.72	42.77	7405	18.79	18.38	39.07
Definitely will	14535	18.56	20.77	38.88	17614	14.71	16.56	35.42
Eta		.100				.084		
Beta			.051				.033	
Region								
South	9567	19.90	21.03	39.93	11289	13.32	15.21	33.98
NE	7347	26.01	25.40	43.87	7192	22.81	22.01	41.96
NC	9071	23.77	23.22	42.57	10319	19.23	18.27	39.41
West	6582	24.22	23.81	42.85	6802	18.37	17.28	38.72
Eta		.055				.092		
Beta			.038				.064	
Urbanicity								
Farm	870	15.75	14.59	36.45	849	10.17	11.08	30.25
Country	1466	19.67	18.66	39.77	1599	14.13	14.51	34.85
NonSMSA	4797	23.15	23.08	42.19	5273	16.85	17.02	37.43
NonS-R	15620	23.25	23.52	42.25	17408	18.18	18.49	38.57
Self-Rep	9814	24.78	24.76	43.18	10473	19.73	18.80	39.80
Eta		.045				.052		
Beta			.052				.043	

Table 8, cont.

Predictor	Males 30 day marijuana use n	x	(x adj)	sd	Females 30 day marijuana use n	x	(x adj)	sd
Parent Ed								
Low	2960	22.55	21.29	41.80	3851	16.55	16.54	37.17
2	9201	23.49	21.37	42.40	10152	18.01	16.37	38.43
3	8954	23.04	22.73	42.11	9851	18.19	18.10	38.58
4	7505	23.45	25.25	42.37	7736	18.13	19.06	38.53
High	3947	21.99	25.80	41.42	4012	17.18	20.17	37.73
Eta		.012				.014		
Beta			.042				.034	
Curriculum								
Coll prep	17361	19.58	21.86	39.68	19865	15.19	16.46	35.89
General	11335	26.44	24.16	44.11	12352	21.10	19.38	40.80
Voc-Tech	3871	27.62	24.98	44.72	3385	20.55	19.77	40.41
Eta		.086				.075		
Beta			.031				.039	
Grades								
D, C-	2020	37.09	35.69	48.32	1204	32.72	31.91	46.94
C, C+	8469	29.29	28.42	45.51	6533	24.53	23.97	43.03
B-, B	11975	22.93	22.77	42.04	12923	19.44	19.00	39.58
B+, A-	7675	17.00	17.95	37.56	11309	13.79	14.19	34.48
A	2428	11.11	12.94	31.44	3633	8.87	10.34	28.44
Eta		.153				.143		
Beta			.132				.128	
Hours work per week								
Don't work	6454	19.85	21.28	39.89	7650	14.02	15.21	34.73
5 or less	2127	20.47	21.79	40.36	2137	12.89	13.91	33.52
6-10	2557	19.99	20.85	40.00	2954	16.04	16.43	36.70
11-15	3187	23.52	24.11	42.42	4257	17.05	16.75	37.61
16-20	5191	24.11	23.43	42.78	6470	20.39	19.74	40.30
21-25	4484	25.70	24.59	43.71	4781	22.22	21.07	41.58
26-30	3071	26.21	24.68	43.98	2666	22.21	21.17	41.58
31 or more	3317	27.03	25.18	44.42	2208	22.59	21.44	41.83
Don't work for money	2179	20.60	21.90	40.46	2479	14.46	15.66	35.17
Eta		.065				.092		
Beta			.037				.068	
R^2		.044				.052		
R^2(adj)		.043				.051		

Table 9
Prevalence of Monthly Cocaine Use Predicted by Hours of Work, Background, and Educational Success: Multiple Classification Analyses of Males and Females in the Classes of 1985-1989

Predictor	Males 30 day cocaine use				Females 30 day cocaine use			
	n	x	(x adj)	sd	n	x	(x adj)	sd
Base year								
1985	6354	7.40	7.34	26.18	7179	5.54	5.57	22.88
1986	6062	7.06	7.03	25.62	6839	4.91	4.86	21.60
1987	6537	4.72	4.65	21.21	7336	3.68	3.51	18.82
1988	6841	4.00	4.03	19.59	7254	2.41	2.45	15.32
1989	7079	3.62	3.74	18.68	7262	1.95	2.08	13.81
Eta		.070				.074		
Beta			.068				.072	
Race								
Black	3224	2.66	2.45	16.08	4241	1.01	0.94	10.00
White	25534	5.37	5.55	22.55	27642	3.98	4.09	19.54
Hispanic	1921	8.48	7.49	27.87	1959	3.10	2.49	17.33
Other	2194	5.42	4.53	22.65	2028	4.99	4.23	21.79
Eta		.049				.053		
Beta			.047				.055	
College Plans								
Definitely won't	5216	7.67	6.39	26.61	5843	5.32	4.36	22.44
Probably won't	4879	6.69	5.83	24.98	4894	5.16	4.45	22.12
Probably will	8163	5.83	5.78	23.42	7451	3.60	3.42	18.63
Definitely will	14615	3.53	4.39	18.46	17682	2.62	3.26	15.98
Eta		.073				.061		
Beta			.036				.027	
Region								
South	9688	3.78	4.29	19.07	11402	2.23	2.90	14.76
NE	7409	7.24	6.81	25.92	7241	5.50	5.06	22.79
NC	9158	3.85	3.85	19.25	10396	2.55	2.30	15.78
West	6618	7.81	7.45	26.84	6831	5.93	5.56	23.62
Eta		.081				.087		
Beta			.067				.071	
Urbanicity								
Farm	885	2.68	2.34	16.15	849	1.35	1.89	11.56
Country	1484	3.34	3.09	17.97	1617	2.41	2.52	15.35
NonSMSA	4844	4.17	4.39	19.99	5322	2.88	3.00	16.74
NonS-R	15756	5.19	5.23	22.19	17547	3.32	3.33	17.92
Self-Rep	9904	7.24	7.13	25.92	10535	5.42	5.22	22.64
Eta		.058				.059		
Beta			.057				.051	

Table 9, cont.

Predictor	Males 30 day cocaine use n	x	(x adj)	sd	Females 30 day cocaine use n	x	(x adj)	sd
Parent Ed								
Low	3019	6.16	4.97	24.05	3909	3.43	2.88	18.21
2	9288	5.50	4.85	22.79	10258	3.56	3.07	18.52
3	9023	5.26	5.24	22.32	9923	3.78	3.81	19.07
4	7561	5.12	5.82	22.03	7769	3.81	4.22	19.13
High	3982	4.55	5.94	20.84	4011	3.56	4.63	18.52
Eta		.018				.007		
Beta			.019				.031	
Curriculum								
Coll prep	17470	3.82	4.52	19.16	19951	2.48	2.81	15.55
General	11482	6.49	5.80	24.64	12483	5.12	4.66	22.03
Voc-Tech	3921	7.78	6.97	26.79	3436	4.81	4.67	21.39
Eta		.070				.068		
Beta			.039				.049	
Grades								
D, C-	2040	9.85	8.95	29.80	1226	9.02	8.22	28.66
C, C+	8586	7.22	6.61	25.88	6626	5.16	4.68	22.13
B-, B	12073	4.91	4.84	21.61	13022	3.97	3.77	19.53
B+, A-	7725	3.66	4.24	18.78	11357	2.79	3.09	16.48
A	2449	2.28	3.60	14.92	3639	0.97	1.84	9.81
Eta		.084				.083		
Beta			.060				.062	
Hours work per week								
Don't work	6520	3.66	4.12	18.79	7723	2.99	3.30	17.02
5 or less	2130	4.02	4.52	19.65	2157	1.64	1.86	12.72
6-10	2581	4.27	4.58	20.22	2966	2.29	2.47	14.97
11-15	3209	4.92	5.22	21.63	4263	3.61	3.63	18.65
16-20	5245	5.72	5.56	23.22	6523	3.56	3.45	18.52
21-25	4523	5.70	5.35	23.19	4811	5.24	4.89	22.29
26-30	3109	6.84	6.28	25.25	2684	5.39	5.08	22.59
31 or more	3355	8.70	7.92	28.19	2245	6.41	5.93	24.49
Don't work for money	2201	4.05	4.48	19.71	2498	2.31	2.55	15.04
Eta		.069				.069		
Beta			.050				.056	
R^2		.029				.031		
R^2(adj)		.028				.030		

Table 10
Prevalence of Monthly Amphetamine Use Predicted by Hours of Work, Background, and Educational Success: Multiple Classification Analyses of Males and Females in the Classes of 1985-1989

Predictor	Males 30 day amphetamine use				Females 30 day amphetamine use			
	n	x	(x adj)	sd	n	x	(x adj)	sd
Base year								
1985	6345	6.55	6.44	24.74	7168	7.24	7.18	25.92
1986	6057	4.88	4.73	21.55	6852	5.61	5.42	23.01
1987	6554	4.75	4.75	21.27	7343	5.20	5.11	22.20
1988	6865	4.41	4.53	20.53	7246	4.48	4.63	20.69
1989	7096	4.27	4.39	20.23	7258	3.94	4.11	19.47
Eta		.038				.051		
Beta			.034				.047	
Race								
Black	3228	2.04	1.78	14.15	4244	1.32	0.86	11.40
White	25546	5.36	5.36	22.53	27632	5.91	5.96	23.57
Hispanic	1935	4.19	4.40	20.04	1959	3.94	3.92	19.45
Other	2208	4.89	5.09	21.57	2032	5.65	5.82	23.10
Eta		.045				.066		
Beta			.048				.073	
College Plans								
Definitely won't	5216	8.45	7.04	27.82	5830	7.81	6.40	26.83
Probably won't	4881	6.54	5.57	24.73	4890	7.18	6.15	25.81
Probably will	8161	4.66	4.75	21.08	7450	6.07	5.92	23.88
Definitely will	14659	3.12	4.01	17.40	17697	3.43	4.31	18.20
Eta		.092				.083		
Beta			.051				.041	
Region								
South	9671	4.40	4.59	20.51	11384	4.31	4.83	20.32
NE	7441	4.48	4.53	20.68	7256	5.30	5.31	22.40
NC	9160	5.78	5.55	23.34	10398	6.12	5.81	23.97
West	6645	5.24	5.19	22.28	6829	5.66	5.17	23.12
Eta		.027				.033		
Beta			.020				.017	
Urbanicity								
Farm	890	6.25	4.92	24.23	846	4.05	3.65	19.73
Country	1477	4.95	4.34	21.70	1612	6.04	5.72	23.83
NonSMSA	4836	5.64	5.54	23.06	5318	6.23	6.06	24.17
NonS-R	15773	4.86	4.93	21.50	17539	5.20	5.32	22.20
Self-Rep	9941	4.47	4.76	20.66	10552	4.71	4.73	21.19
Eta		.021				.026		
Beta			.014				.024	

Table 10, cont.

Predictor	Males 30 day amphetamine use n	x	(x adj)	sd	Females 30 day amphetamine use n	x	(x adj)	sd
Parent Ed								
Low	3015	4.79	3.93	21.36	3897	5.18	4.61	22.17
2	9294	5.79	4.85	23.36	10265	6.03	5.25	23.81
3	9045	5.20	5.21	22.20	9931	5.31	5.32	22.42
4	7574	4.21	5.07	20.09	7758	4.98	5.60	21.76
High	3989	3.80	5.31	19.13	4016	3.67	5.25	18.79
Eta		.033				.030		
Beta			.017				.012	
Curriculum								
Coll prep	17499	3.40	4.38	18.13	19947	3.93	4.72	19.42
General	11488	5.98	5.18	23.71	12486	6.80	5.81	25.17
Voc-Tech	3930	8.13	6.57	27.33	3434	7.08	6.27	25.65
Eta		.079				.066		
Beta			.034				.027	
Grades								
D, C-	2043	9.66	8.65	29.56	1230	11.86	11.10	32.35
C, C+	8593	6.61	6.03	24.84	6615	7.25	6.76	25.94
B-, B	12095	4.35	4.31	20.41	13040	5.64	5.49	23.07
B+, A-	7732	3.65	4.23	18.76	11335	4.17	4.45	20.00
A	2454	2.67	3.83	16.12	3647	1.92	2.66	13.74
Eta		.079				.087		
Beta			.056				.071	
Hours work per week								
Don't work	6543	3.29	3.85	17.83	7733	4.32	4.64	20.34
5 or less	2138	3.70	4.08	18.87	2162	3.23	3.64	17.67
6-10	2590	3.52	3.77	18.44	2959	4.12	4.42	19.88
11-15	3224	4.02	4.24	19.65	4272	4.02	4.08	19.64
16-20	5249	5.38	5.34	22.56	6509	5.30	5.17	22.40
21-25	4522	5.85	5.63	23.46	4818	7.15	6.77	25.77
26-30	3101	6.16	5.56	24.04	2682	7.04	6.60	25.59
31 or more	3352	8.53	7.62	27.94	2236	8.94	8.36	28.54
Don't work for money	2198	4.22	4.34	20.10	2496	4.82	4.98	21.43
Eta		.074				.068		
Beta			.054				.055	
R^2		.020				.023		
R^2(adj)		.019				.022		

Table 11
Interpersonal Aggression Predicted by Hours of Work, Background, and Educational Success: Multiple Classification Analyses of Males and Females in the Classes of 1985-1989

Predictor	Males Interpersonal Aggression				Females Interpersonal Aggression			
	n	x	(x adj)	sd	n	x	(x adj)	sd
Base year								
1985	1323	1.26	1.25	.52	1458	1.10	1.10	.22
1986	1270	1.24	1.23	.45	1386	1.10	1.10	.26
1987	1327	1.24	1.24	.45	1494	1.11	1.11	.26
1988	1410	1.26	1.27	.51	1446	1.10	1.10	.25
1989	1200	1.29	1.30	.57	1255	1.09	1.09	.21
Eta		.042				.030		
Beta			.053				.025	
Race								
Black	652	1.30	1.29	.55	811	1.09	1.09	.25
White	5034	1.24	1.24	.48	5454	1.10	1.10	.24
Hispanic	389	1.31	1.27	.55	385	1.11	1.11	.26
Other	455	1.33	1.33	.65	389	1.11	1.11	.28
Eta		.060				.023		
Beta			.050				.023	
College Plans								
Definitely won't	1061	1.36	1.30	.61	1120	1.15	1.12	.32
Probably won't	1008	1.30	1.26	.51	981	1.11	1.09	.26
Probably will	1618	1.26	1.27	.49	1511	1.10	1.10	.23
Definitely will	2843	1.19	1.23	.44	3427	1.08	1.10	.20
Eta		.130				.115		
Beta			.047				.044	
Region								
South	1935	1.23	1.22	.45	2216	1.08	1.08	.21
NE	1464	1.31	1.32	.57	1442	1.13	1.13	.29
NC	1795	1.24	1.24	.47	2061	1.11	1.11	.24
West	1336	1.26	1.26	.54	1320	1.10	1.09	.25
Eta		.063				.077		
Beta			.076				.080	
Urbanicity								
Farm	174	1.29	1.28	.64	183	1.11	1.12	.24
Country	290	1.27	1.27	.52	323	1.12	1.12	.26
NonSMSA	938	1.24	1.25	.47	1011	1.10	1.10	.23
NonS-R	3162	1.25	1.25	.50	3421	1.09	1.10	.25
Self-Rep	1966	1.27	1.26	.50	2101	1.10	1.09	.24
Eta		.027				.029		
Beta			.012				.028	

Table 11, cont.

Predictor	Males Interpersonal Aggression n	x	(x adj)	sd	Females Interpersonal Aggression n	x	(x adj)	sd
Parent Ed								
Low	674	1.34	1.30	.64	805	1.11	1.10	.27
2	1860	1.27	1.24	.49	1982	1.12	1.11	.26
3	1736	1.25	1.26	.49	1930	1.10	1.10	.24
4	1476	1.24	1.27	.49	1539	1.08	1.10	.21
High	784	1.18	1.23	.39	783	1.08	1.10	.23
Eta		.077				.068		
Beta			.037				.022	
Curriculum								
Coll prep	3413	1.19	1.23	.44	3910	1.08	1.09	.19
General	2302	1.30	1.27	.53	2432	1.12	1.11	.28
Voc-Tech	815	1.37	1.32	.57	697	1.14	1.13	.31
Eta		.134				.114		
Beta			.059				.064	
Grades								
D, C-	422	1.44	1.40	.67	264	1.26	1.24	.47
C, C+	1781	1.32	1.29	.53	1373	1.12	1.11	.26
B-, B	2338	1.25	1.25	.48	2532	1.10	1.10	.24
B+, A-	1534	1.17	1.20	.42	2161	1.08	1.09	.21
A	455	1.17	1.22	.53	709	1.06	1.07	.17
Eta		.145				.150		
Beta			.100				.121	
Hours work per week								
Don't work	1316	1.21	1.22	.48	1548	1.08	1.09	.22
5 or less	407	1.20	1.21	.41	446	1.11	1.12	.26
6-10	493	1.22	1.23	.41	560	1.10	1.10	.24
11-15	600	1.21	1.22	.42	773	1.08	1.08	.19
16-20	995	1.24	1.24	.47	1250	1.09	1.09	.20
21-25	905	1.26	1.26	.52	968	1.10	1.10	.23
26-30	652	1.30	1.29	.50	538	1.12	1.12	.27
31 or more	673	1.43	1.40	.67	458	1.17	1.16	.38
Don't work for money	489	1.22	1.24	.49	498	1.10	1.11	.26
Eta		.132				.096		
Beta			.107				.082	
R^2		.054					.046	
R^2(adj)		.049					.041	

Table 12
Theft Predicted by Hours of Work,
Background, and Educational Success: Multiple
Classification Analyses of Males and Females in the Classes of 1985-1989

Predictor	Males Theft				Females Theft			
	n	x	(x adj)	sd	n	x	(x adj)	sd
Base year								
1985	1324	1.41	1.40	.65	1457	1.19	1.19	.38
1986	1271	1.39	1.38	.61	1385	1.22	1.22	.41
1987	1327	1.46	1.45	.69	1493	1.23	1.23	.44
1988	1409	1.47	1.48	.67	1446	1.23	1.22	.44
1989	1200	1.45	1.46	.69	1255	1.22	1.22	.43
Eta		.045				.037		
Beta			.053				.033	
Race								
Black	652	1.35	1.36	.58	810	1.13	1.14	.32
White	5035	1.44	1.44	.67	5452	1.23	1.23	.43
Hispanic	389	1.41	1.39	.59	385	1.25	1.23	.48
Other	455	1.49	1.49	.76	389	1.17	1.17	.39
Eta		.047				.081		
Beta			.045				.073	
College Plans								
Definitely won't	1060	1.53	1.50	.76	1120	1.25	1.22	.47
Probably won't	1008	1.47	1.45	.70	981	1.23	1.21	.42
Probably will	1620	1.44	1.44	.65	1510	1.22	1.22	.42
Definitely will	2843	1.38	1.40	.60	3425	1.20	1.21	.39
Eta		.082				.044		
Beta			.057				.013	
Region								
South	1936	1.37	1.38	.59	2216	1.15	1.17	.36
NE	1464	1.50	1.50	.76	1441	1.28	1.27	.47
NC	1795	1.43	1.43	.63	2060	1.22	1.21	.41
West	1336	1.47	1.46	.71	1319	1.25	1.24	.45
Eta		.074				.117		
Beta			.064				.091	
Urbanicity								
Farm	174	1.35	1.36	.68	183	1.15	1.17	.39
Country	290	1.35	1.36	.53	323	1.14	1.16	.34
NonSMSA	938	1.41	1.43	.66	1011	1.20	1.22	.40
NonS-R	3164	1.44	1.44	.66	3420	1.22	1.22	.43
Self-Rep	1965	1.48	1.46	.69	2099	1.25	1.23	.43
Eta		.052				.065		
Beta			.041				.041	

Table 12, cont.

Predictor	Males Theft				Females Theft			
	n	x	(x adj)	sd	n	x	(x adj)	sd
Parent Ed								
Low	674	1.43	1.42	.72	805	1.21	1.23	.46
2	1860	1.43	1.41	.65	1981	1.22	1.21	.41
3	1735	1.45	1.45	.67	1929	1.21	1.21	.42
4	1477	1.43	1.45	.66	1539	1.23	1.23	.42
High	785	1.43	1.46	.64	782	1.20	1.22	.40
Eta		.012				.019		
Beta			.030				.020	
Curriculum								
Coll prep	3415	1.39	1.43	.61	3907	1.20	1.21	.40
General	2301	1.48	1.45	.70	2432	1.23	1.22	.44
Voc-Tech	815	1.46	1.41	.72	697	1.23	1.23	.46
Eta		.060				.041		
Beta			.018				.019	
Grades								
D, C-	422	1.64	1.63	.85	264	1.37	1.37	.66
C, C+	1780	1.48	1.47	.68	1372	1.26	1.26	.46
B-, B	2340	1.45	1.45	.66	2531	1.22	1.22	.41
B+, A-	1534	1.34	1.36	.57	2160	1.19	1.19	.37
A	455	1.30	1.32	.63	709	1.16	1.18	.36
Eta		.125				.102		
Beta			.106				.095	
Hours work per week								
Don't work	1317	1.34	1.36	.58	1548	1.16	1.17	.34
5 or less	407	1.34	1.35	.59	446	1.17	1.19	.37
6-10	494	1.42	1.42	.62	558	1.19	1.19	.37
11-15	600	1.44	1.45	.63	773	1.25	1.24	.45
16-20	994	1.50	1.48	.68	1250	1.24	1.24	.46
21-25	905	1.46	1.44	.69	968	1.26	1.26	.43
26-30	652	1.47	1.46	.67	537	1.27	1.26	.50
31 or more	673	1.58	1.57	.84	458	1.26	1.24	.51
Don't work for money	489	1.37	1.39	.57	498	1.18	1.19	.35
Eta		.114				.107		
Beta			.097				.084	
R^2		.040					.040	
R^2(adj)		.035					.036	

Table 13
Trouble with Police Predicted by Hours of Work, Background, and Educational Success: Multiple Classification Analyses of Males and Females in the Classes of 1985-1989

Predictor	Males Trouble with Police				Females Trouble with Police			
	n	x	(x adj)	sd	n	x	(x adj)	sd
Base year								
1985	1322	31.01	30.73	46.27	1457	13.06	13.10	33.71
1986	1268	29.64	29.21	45.69	1385	12.63	12.66	33.23
1987	1325	34.70	34.62	47.62	1492	14.00	13.79	34.71
1988	1409	33.58	34.02	47.25	1445	12.71	12.68	33.32
1989	1200	34.10	34.47	47.43	1255	13.47	13.65	34.16
Eta		.041				.015		
Beta			.047				.014	
Race								
Black	652	19.76	20.13	39.85	811	4.62	5.29	21.00
White	5028	34.29	34.23	47.47	5449	14.58	14.48	35.30
Hispanic	389	30.40	29.51	46.06	385	12.22	12.51	32.79
Other	455	32.44	33.43	46.87	389	11.30	11.11	31.70
Eta		.090				.093		
Beta			.088				.086	
College Plans								
Definitely won't	1060	37.76	34.01	48.50	1119	17.34	15.57	37.87
Probably won't	1007	36.25	33.46	48.10	981	10.58	9.67	30.77
Probably will	1618	32.87	32.44	46.99	1510	14.46	14.35	35.18
Definitely will	2839	28.85	31.78	45.32	3424	11.90	12.86	32.39
Eta		.076				.066		
Beta			.019				.052	
Region								
South	1935	27.87	28.84	44.85	2216	9.34	10.31	29.10
NE	1461	31.76	32.19	46.57	1440	12.11	12.15	32.64
NC	1795	37.17	36.39	48.34	2059	16.78	16.29	37.38
West	1333	35.11	34.09	47.75	1319	15.67	14.64	36.37
Eta		.081				.093		
Beta			.064				.073	
Urbanicity								
Farm	174	28.78	28.20	45.41	183	11.34	10.85	31.80
Country	290	29.44	29.71	45.65	323	12.27	12.90	32.86
NonSMSA	937	33.12	33.85	47.09	1010	13.75	13.91	34.46
NonS-R	3160	33.74	33.65	47.29	3419	13.73	13.81	34.42
Self-Rep	1963	31.45	31.15	46.44	2099	12.25	11.92	32.80
Eta		.032				.023		
Beta			.034				.028	

Table 13, cont.

Predictor	Males Trouble with Police n	x	(x adj)	sd	Females Trouble with Police n	x	(x adj)	sd
Parent Ed								
Low	672	30.40	30.79	46.03	805	9.54	10.07	29.39
2	1860	31.83	30.28	46.59	1981	14.11	13.57	34.83
3	1734	34.78	34.29	47.64	1927	12.91	12.68	33.54
4	1473	33.43	34.43	47.19	1539	14.73	14.76	35.45
High	785	29.99	32.92	45.85	782	12.37	13.81	32.95
Eta		.036				.046		
Beta			.040				.040	
Curriculum								
Coll prep	3409	29.48	32.03	45.60	3907	11.88	12.23	32.36
General	2300	34.29	32.02	47.48	2430	15.08	14.35	35.79
Voc-Tech	815	39.45	36.18	48.91	697	13.50	14.11	34.20
Eta		.075				.044		
Beta			.031				.031	
Grades								
D, C-	422	46.08	46.25	49.91	264	25.23	25.33	43.52
C, C+	1778	39.61	39.54	48.92	1372	14.24	14.33	34.96
B-, B	2337	32.27	32.07	46.76	2532	13.43	13.25	34.11
B+, A-	1532	25.50	25.80	43.60	2158	12.42	12.41	32.99
A	455	20.73	20.86	40.58	708	8.59	9.02	28.04
Eta		.146				.083		
Beta			.144				.081	
Hours work per week								
Don't work	1317	25.54	27.58	43.63	1548	12.19	13.16	32.73
5 or less	407	30.85	31.85	46.25	444	10.42	10.98	30.59
6-10	493	34.76	35.49	47.67	559	12.59	12.51	33.20
11-15	600	31.08	31.33	46.32	773	10.90	10.29	31.18
16-20	993	34.17	33.23	47.45	1250	14.39	13.85	35.11
21-25	903	37.45	36.13	48.43	968	14.05	13.52	34.76
26-30	651	37.40	35.69	48.42	536	13.25	12.94	33.93
31 or more	672	38.37	37.07	48.67	458	15.72	15.05	36.44
Don't work for money	488	26.69	27.59	44.28	498	15.76	16.29	36.47
Eta		.102				.047		
Beta			.076				.045	
R^2		.049					.030	
R^2(adj)		.044					.025	

Table 14
Arguing or Fighting with a Parent Predicted by Hours of Work, Background, and Educational Success: Multiple Classification Analyses of Males and Females in the Classes of 1985-1989

Predictor	Males Fighting with a Parent n	x	(x adj)	sd	Females Fighting with a Parent n	x	(x adj)	sd
Base year								
1985	1318	3.65	3.67	1.43	1457	4.03	4.03	1.23
1986	1267	3.70	3.71	1.39	1386	4.02	4.03	1.27
1987	1321	3.74	3.73	1.37	1489	4.14	4.13	1.17
1988	1409	3.81	3.80	1.35	1445	4.09	4.09	1.24
1989	1198	3.80	3.80	1.39	1255	4.09	4.09	1.22
Eta		.045				.036		
Beta			.037				.032	
Race								
Black	651	2.86	2.88	1.60	809	3.12	3.16	1.54
White	5020	3.87	3.87	1.30	5450	4.24	4.23	1.09
Hispanic	387	3.63	3.69	1.47	385	3.94	3.97	1.32
Other	455	3.50	3.51	1.53	388	3.79	3.83	1.36
Eta		.216				.290		
Beta			.209				.275	
College Plans								
Definitely won't	1058	3.66	3.67	1.46	1120	4.08	4.10	1.23
Probably won't	1006	3.65	3.68	1.42	981	3.97	4.02	1.29
Probably will	1613	3.75	3.75	1.38	1508	4.05	4.08	1.25
Definitely will	2836	3.80	3.79	1.35	3423	4.12	4.08	1.20
Eta		.046				.042		
Beta			.035				.020	
Region								
South	1931	3.64	3.73	1.44	2211	3.93	4.06	1.32
NE	1455	3.81	3.78	1.36	1442	4.14	4.08	1.16
NC	1792	3.78	3.74	1.37	2061	4.13	4.07	1.20
West	1335	3.78	3.72	1.35	1318	4.18	4.11	1.14
Eta		.049				.084		
Beta			.015				.014	
Urbanicity								
Farm	174	3.59	3.62	1.41	183	4.09	4.05	1.25
Country	290	3.65	3.67	1.42	323	3.92	3.97	1.32
NonSMSA	935	3.64	3.66	1.40	1008	4.08	4.07	1.23
NonS-R	3153	3.77	3.75	1.39	3418	4.08	4.08	1.22
Self-Rep	1961	3.81	3.81	1.37	2100	4.09	4.09	1.22
Eta		.049				.033		
Beta			.041				.024	

Table 14, cont.

Predictor	Males Fighting with a Parent				Females Fighting with a Parent			
	n	x	(x adj)	sd	n	x	(x adj)	sd
Parent Ed								
Low	672	3.44	3.57	1.53	805	3.81	4.01	1.39
2	1854	3.70	3.72	1.42	1981	4.05	4.08	1.25
3	1733	3.75	3.73	1.37	1927	4.11	4.09	1.19
4	1473	3.85	3.80	1.33	1537	4.18	4.10	1.12
High	781	3.91	3.86	1.28	782	4.15	4.07	1.21
Eta		.090				.088		
Beta			.054				.023	
Curriculum								
Coll prep	3402	3.81	3.78	1.33	3905	4.17	4.15	1.15
General	2297	3.69	3.71	1.43	2431	3.99	3.99	1.29
Voc-Tech	814	3.64	3.68	1.46	696	3.88	3.96	1.35
Eta		.048				.084		
Beta			.028				.071	
Grades								
D, C-	421	3.85	3.98	1.44	264	4.14	4.32	1.22
C, C+	1777	3.80	3.87	1.39	1372	4.09	4.21	1.26
B-, B	2331	3.69	3.68	1.39	2531	4.06	4.07	1.22
B+, A-	1531	3.71	3.65	1.38	2158	4.07	4.01	1.23
A	453	3.79	3.66	1.36	707	4.08	3.97	1.20
Eta		.038				.013		
Beta			0.79				.074	
Hours work per week								
Don't work	1313	3.53	3.60	1.50	1545	3.84	3.93	1.36
5 or less	406	3.58	3.58	1.39	446	4.10	4.08	1.19
6-10	492	3.72	3.71	1.35	559	4.04	3.98	1.24
11-15	600	3.78	3.74	1.36	773	4.20	4.14	1.14
16-20	992	3.91	3.86	1.32	1250	4.24	4.20	1.09
21-25	900	3.75	3.72	1.33	966	4.20	4.16	1.14
26-30	650	3.84	3.82	1.37	538	4.15	4.15	1.21
31 or more	672	3.87	3.91	1.38	458	4.10	4.13	1.20
Don't work for money	488	3.74	3.75	1.36	497	3.95	3.99	1.30
Eta		.096				.123		
Beta			.078				.083	
R^2		.067					.101	
R^2(adj)		.062					.097	

Table 15
Victimization Predicted by Hours of Work, Background, and Educational Success: Multiple Classification Analyses of Males and Females in the Classes of 1985-1989

Predictor	Males				Females			
		Victimization				Victimization		
	n	x	(x adj)	sd	n	x	(x adj)	sd
Base year								
1985	1323	1.31	1.31	.46	1457	1.19	1.19	.35
1986	1267	1.31	1.31	.47	1383	1.18	1.18	.31
1987	1326	1.34	1.34	.48	1492	1.21	1.21	.36
1988	1407	1.38	1.38	.53	1446	1.20	1.20	.32
1989	1197	1.35	1.36	.50	1255	1.21	1.21	.35
Eta		.056				.039		
Beta			.059				.035	
Race								
Black	649	1.39	1.39	.51	810	1.26	1.25	.40
White	5026	1.32	1.33	.47	5450	1.18	1.19	.32
Hispanic	390	1.41	1.36	.53	385	1.25	1.22	.40
Other	455	1.39	1.38	.60	388	1.22	1.22	.36
Eta		.062				.081		
Beta			.046				.058	
College Plans								
Definitely won't	1055	1.38	1.34	.56	1119	1.22	1.19	.37
Probably won't	1007	1.38	1.35	.52	980	1.20	1.17	.32
Probably will	1619	1.35	1.34	.48	1508	1.21	1.21	.36
Definitely will	2839	1.30	1.33	.45	3426	1.18	1.20	.32
Eta		.071				.048		
Beta			.013				.034	
Region								
South	1935	1.32	1.32	.45	2213	1.20	1.20	.35
NE	1460	1.33	1.33	.49	1440	1.18	1.18	.33
NC	1792	1.32	1.32	.48	2061	1.20	1.20	.33
West	1333	1.41	1.40	.55	1319	1.21	1.21	.34
Eta		.071				.029		
Beta			.063				.026	
Urbanicity								
Farm	174	1.29	1.27	.53	183	1.19	1.20	.34
Country	290	1.28	1.28	.42	321	1.17	1.18	.36
NonSMSA	935	1.30	1.31	.47	1011	1.18	1.18	.33
NonS-R	3160	1.34	1.34	.48	3419	1.20	1.20	.34
Self-Rep	1961	1.38	1.37	.53	2099	1.21	1.20	.34
Eta		.062				.035		
Beta			.055				.026	

Table 15, cont.

Predictor	Males				Females			
		Victimization				Victimization		
	n	x	(x adj)	sd	n	x	(x adj)	sd
Parent Ed								
Low	672	1.38	1.36	.59	804	1.26	1.24	.43
2	1857	1.34	1.33	.50	1980	1.19	1.19	.32
3	1735	1.34	1.34	.46	1928	1.19	1.19	.34
4	1471	1.34	1.35	.48	1539	1.19	1.20	.32
High	785	1.31	1.34	.43	782	1.16	1.18	.29
Eta		.036				.075		
Beta			.022				.048	
Curriculum								
Coll prep	3408	1.30	1.32	.43	3907	1.17	1.18	.31
General	2297	1.37	1.35	.52	2429	1.23	1.21	.37
Voc-Tech	815	1.41	1.39	.57	697	1.23	1.22	.38
Eta		.093				.087		
Beta			.053				.050	
Grades								
D, C-	420	1.44	1.42	.59	264	1.28	1.26	.41
C, C+	1779	1.41	1.39	.53	1371	1.24	1.23	.40
B-, B	2336	1.33	1.33	.47	2530	1.21	1.21	.35
B+, A-	1533	1.28	1.30	.42	2159	1.17	1.18	.30
A	452	1.26	1.30	.49	709	1.15	1.16	.25
Eta		.115				.100		
Beta			.084				.073	
Hours work per week								
Don't work	1314	1.29	1.29	.47	1547	1.17	1.16	.32
5 or less	407	1.27	1.29	.40	446	1.19	1.21	.38
6-10	493	1.37	1.38	.54	558	1.18	1.19	.31
11-15	600	1.31	1.32	.45	772	1.16	1.17	.28
16-20	994	1.33	1.32	.48	1249	1.18	1.19	.32
21-25	905	1.36	1.35	.49	968	1.22	1.22	.33
26-30	648	1.34	1.34	.48	537	1.25	1.25	.39
31 or more	671	1.47	1.46	.57	458	1.29	1.27	.44
Don't work for money	488	1.32	1.33	.47	498	1.21	1.21	.38
Eta		.113				.102		
Beta			.102				.092	
R^2		.041					.031	
R^2(adj)		.036					.026	

Table 16
Seven or More Hours of Sleep Predicted by Hours of Work, Background, and Educational Success: Multiple Classification Analyses of Males and Females in the Classes of 1985-1989

Predictor	Males 7+ hours of sleep per night				Females 7+ hours of sleep per night			
	n	x	(x adj)	sd	n	x	(x adj)	sd
Base year								
1985	1161	4.17	4.17	1.38	1327	4.02	4.01	1.36
1986	1104	4.19	4.20	1.40	1279	4.04	4.03	1.35
1987	1128	4.12	4.12	1.39	1353	3.90	3.90	1.36
1988	1208	4.15	4.15	1.43	1298	3.71	3.73	1.41
1989	1050	4.07	4.06	1.44	1140	3.92	3.94	1.40
Eta		.029				.086		
Beta			.031				.079	
Race								
Black	495	4.13	4.11	1.44	670	4.00	3.98	1.49
White	4463	4.15	4.16	1.40	5067	3.91	3.92	1.37
Hispanic	311	4.19	4.21	1.43	325	4.01	4.01	1.35
Other	382	3.96	3.92	1.47	335	3.82	3.75	1.39
Eta		.034				.029		
Beta			.044				.035	
College Plans								
Definitely won't	849	4.03	4.07	1.56	1007	3.85	3.82	1.50
Probably won't	832	3.94	3.95	1.4[illegible]	866	3.99	3.99	1.40
Probably will	1388	4.13	4.12	1.34	1343	3.84	3.84	1.33
Definitely will	2582	4.26	4.25	1.37	3181	3.95	3.96	1.35
Eta		.087				.042		
Beta			.079				.049	
Region								
South	1687	4.13	4.13	1.45	2018	3.90	3.85	1.40
NE	1177	4.14	4.13	1.42	1225	3.98	4.02	1.41
NC	1616	4.10	4.09	1.38	1924	3.87	3.88	1.39
West	1171	4.23	4.26	1.37	1230	3.94	3.99	1.31
Eta		.032				.029		
Beta			.041				.049	
Urbanicity								
Farm	156	4.00	4.07	1.40	173	4.03	4.07	1.34
Country	255	4.31	4.33	1.45	302	4.08	4.07	1.39
NonSMSA	816	4.32	4.30	1.36	941	4.07	4.06	1.35
NonS-R	2750	4.10	4.10	1.42	3138	3.85	3.85	1.39
Self-Rep	1674	4.07	4.07	1.41	1843	3.88	3.89	1.38
Eta		.071				.068		
Beta			.067				.064	

Table 16, cont.

Predictor	Males 7+ hours of sleep per night n	x	(x adj)	sd	Females 7+ hours of sleep per night n	x	(x adj)	sd
Parent Ed								
Low	532	4.04	4.10	1.50	691	3.90	3.88	1.48
2	1562	4.15	4.21	1.43	1766	3.93	3.93	1.41
3	1503	4.14	4.14	1.40	1791	3.92	3.95	1.37
4	1329	4.14	4.08	1.39	1420	3.89	3.89	1.33
High	725	4.22	4.11	1.32	729	3.92	3.89	1.32
Eta		.030				.012		
Beta			.036				.019	
Curriculum								
Coll prep	3079	4.21	4.12	1.36	3638	3.92	3.89	1.35
General	1914	4.09	4.15	1.44	2138	3.92	3.95	1.40
Voc-Tech	658	4.02	4.20	1.50	621	3.90	3.99	1.46
Eta		.052				.004		
Beta			.018				.026	
Grades								
D, C-	335	3.82	3.88	1.53	217	3.60	3.58	1.54
C, C+	1455	4.04	4.11	1.47	1182	3.94	3.96	1.45
B-, B	2035	4.22	4.23	1.37	2302	3.97	3.98	1.36
B+, A-	1390	4.20	4.15	1.35	2014	3.91	3.90	1.36
A	436	4.13	4.00	1.42	682	3.84	3.81	1.33
Eta		.076				.052		
Beta			.066				.059	
Hours work per week								
Don't work	1146	4.39	4.39	1.40	1375	4.25	4.26	1.37
5 or less	350	4.57	4.56	1.31	411	4.12	4.11	1.31
6-10	442	4.26	4.24	1.37	510	4.04	4.04	1.36
11-15	532	4.24	4.24	1.34	719	3.99	3.99	1.33
16-20	873	4.15	4.15	1.33	1138	3.78	3.79	1.31
21-25	759	3.87	3.88	1.41	870	3.67	3.67	1.39
26-30	544	3.76	3.78	1.42	494	3.60	3.60	1.42
31 or more	563	3.72	3.73	1.53	412	3.47	3.46	1.51
Don't work for money	442	4.35	4.32	1.28	468	3.94	3.95	1.29
Eta		.189				.181		
Beta			.186				.182	
R^2		.054					.051	
R^2(adj)		.048					.046	

Table 17
Eating Breakfast Predicted by Hours of Work, Background, and Educational Success: Multiple Classification Analyses of Males and Females in the Classes of 1985-1989

Predictor	Males				Females			
	n	x	Eating breakfast (x adj)	sd	n	x	Eating breakfast (x adj)	sd
Base year								
1985	1167	3.87	3.87	1.80	1333	3.33	3.31	1.69
1986	1113	3.76	3.78	1.81	1284	3.31	3.30	1.68
1987	1131	3.73	3.73	1.77	1358	3.25	3.27	1.69
1988	1211	3.71	3.69	1.76	1305	3.12	3.14	1.66
1989	1059	3.69	3.69	1.80	1145	3.19	3.18	1.68
Eta		.034				.045		
Beta			.038				.040	
Race								
Black	500	3.39	3.49	1.64	672	2.90	3.00	1.41
White	4481	3.82	3.81	1.80	5087	3.30	3.28	1.70
Hispanic	312	3.40	3.50	1.67	329	2.94	3.04	1.62
Other	388	3.69	3.64	1.82	337	3.34	3.28	1.76
Eta		.082				.082		
Beta			.062				.057	
College Plans								
Definitely won't	855	3.47	3.70	1.80	1013	2.94	3.18	1.63
Probably won't	836	3.48	3.65	1.71	864	3.06	3.25	1.56
Probably will	1400	3.70	3.71	1.75	1352	3.16	3.21	1.65
Definitely will	2590	3.99	3.84	1.80	3196	3.43	3.28	1.72
Eta		.126				.117		
Beta			.041				.024	
Region								
South	1693	3.71	3.75	1.74	2027	3.32	3.34	1.68
NE	1184	3.81	3.77	1.83	1230	3.20	3.20	1.70
NC	1626	3.68	3.65	1.84	1934	3.17	3.16	1.69
West	1178	3.87	3.90	1.75	1234	3.24	3.24	1.65
Eta		.042				.036		
Beta			.046				.043	
Urbanicity								
Farm	158	3.79	3.90	1.82	172	3.44	3.37	1.69
Country	259	3.92	3.97	1.78	305	3.32	3.32	1.66
NonSMSA	820	3.84	3.84	1.73	945	3.27	3.22	1.69
NonS-R	2761	3.73	3.72	1.80	3151	3.21	3.21	1.67
Self-Rep	1683	3.69	3.68	1.80	1852	3.23	3.28	1.69
Eta		.037				.030		
Beta			.047				.025	

Table 17, cont.

Predictor	Males Eating breakfast				Females Eating breakfast			
	n	x	(x adj)	sd	n	x	(x adj)	sd
Parent Ed								
Low	539	3.43	3.62	1.72	695	2.97	3.13	1.58
2	1574	3.67	3.77	1.77	1776	3.11	3.18	1.66
3	1511	3.76	3.77	1.80	1795	3.23	3.24	1.64
4	1332	3.83	3.72	1.81	1427	3.42	3.33	1.74
High	725	4.06	3.84	1.77	732	3.57	3.34	1.74
Eta		.088				.107		
Beta			.030				.044	
Curriculum								
Coll prep	3095	3.99	3.86	1.79	3651	3.43	3.30	1.72
General	1926	3.51	3.63	1.75	2151	3.04	3.20	1.61
Voc-Tech	660	3.46	3.66	1.77	623	2.87	3.08	1.57
Eta		.140				.132		
Beta			.063				.043	
Grades								
D, C-	338	3.17	3.33	1.72	222	2.56	2.72	1.49
C, C+	1467	3.45	3.58	1.74	1188	2.77	2.87	1.53
B-, B	2046	3.80	3.81	1.77	2315	3.23	3.26	1.67
B+, A-	1393	3.98	3.89	1.79	2018	3.38	3.34	1.68
A	437	4.21	3.96	1.80	682	3.82	3.66	1.75
Eta		.151				.187		
Beta			.092				.140	
Hours work per week								
Don't work	1151	3.92	3.91	1.80	1381	3.39	3.42	1.73
5 or less	352	4.23	4.17	1.79	411	3.74	3.61	1.79
6-10	446	3.94	3.88	1.74	513	3.44	3.37	1.73
11-15	535	3.99	3.96	1.77	724	3.34	3.29	1.70
16-20	876	3.80	3.80	1.76	1147	3.14	3.14	1.62
21-25	767	3.43	3.46	1.78	874	3.05	3.07	1.59
26-30	547	3.51	3.57	1.74	495	2.95	3.01	1.59
31 or more	565	3.35	3.44	1.77	413	2.72	2.86	1.52
Don't work for money	442	3.78	3.72	1.77	467	3.31	3.28	1.67
Eta		.142				.141		
Beta			.120				.113	
R^2		.056					.063	
R^2(adj)		.050					.058	

Table 18
Exercising Vigorously Predicted by Hours of Work, Background, and Educational Success: Multiple Classification Analyses of Males and Females in the Classes of 1985-1989

Predictor	Males frequency of exercise				Females frequency of exercise			
	n	x	(x adj)	sd	n	x	(x adj)	sd
Base year								
1985	1163	4.15	4.17	1.50	1330	3.55	3.55	1.41
1986	1103	4.16	4.17	1.51	1280	3.50	3.51	1.47
1987	1127	4.13	4.14	1.49	1355	3.48	3.48	1.48
1988	1207	4.16	4.14	1.52	1301	3.33	3.34	1.46
1989	1055	4.15	4.14	1.54	1139	3.38	3.37	1.47
Eta		.007				.056		
Beta			.011				.055	
Race								
Black	497	4.21	4.26	1.54	671	3.04	3.16	1.53
White	4464	4.13	4.13	1.50	5071	3.50	3.48	1.44
Hispanic	311	4.21	4.28	1.58	326	3.52	3.61	1.46
Other	383	4.29	4.22	1.49	337	3.37	3.33	1.44
Eta		.030				.096		
Beta			.034				.073	
College Plans								
Definitely won't	853	3.63	3.80	1.62	1008	3.10	3.21	1.44
Probably won't	833	3.85	3.97	1.52	866	3.20	3.32	1.38
Probably will	1389	4.13	4.12	1.43	1345	3.34	3.34	1.38
Definitely will	2580	4.47	4.37	1.42	3186	3.69	3.62	1.48
Eta		.214				.168		
Beta			.143				.114	
Region								
South	1688	4.06	4.09	1.52	2018	3.26	3.29	1.41
NE	1174	4.26	4.22	1.53	1224	3.52	3.51	1.48
NC	1622	4.07	4.08	1.51	1931	3.47	3.46	1.48
West	1171	4.32	4.29	1.45	1232	3.69	3.65	1.45
Eta		.073				.105		
Beta			.056				.090	
Urbanicity								
Farm	157	3.78	3.97	1.51	171	3.55	3.61	1.49
Country	253	4.01	4.15	1.57	302	3.22	3.34	1.43
NonSMSA	816	4.20	4.23	1.47	944	3.50	3.52	1.43
NonS-R	2750	4.18	4.16	1.51	3142	3.45	3.44	1.46
Self-Rep	1679	4.17	4.11	1.51	1846	3.46	3.42	1.47
Eta		.058				.044		
Beta			.036				.036	

Table 18, cont.

Predictor	Males frequency of exercise				Females frequency of exercise			
	n	x	(x adj)	sd	n	x	(x adj)	sd
Parent Ed								
Low	532	3.83	3.99	1.57	691	3.04	3.21	1.37
2	1561	3.99	4.13	1.53	1770	3.34	3.43	1.47
3	1505	4.16	4.16	1.50	1788	3.45	3.44	1.42
4	1332	4.31	4.19	1.48	1426	3.65	3.54	1.47
High	725	4.48	4.24	1.39	730	3.79	3.60	1.47
Eta		.126				.144		
Beta			.042				.071	
Curriculum								
Coll prep	3082	4.39	4.23	1.43	3643	3.63	3.52	1.45
General	1915	3.94	4.08	1.57	2140	3.27	3.38	1.44
Voc-Tech	658	3.74	4.05	1.51	622	3.07	3.33	1.42
Eta		.172				.145		
Beta			.053				.052	
Grades								
D, C-	336	3.57	3.83	1.61	217	2.96	3.18	1.54
C, C+	1458	3.99	4.15	1.56	1183	3.32	3.49	1.49
B-, B	2035	4.18	4.19	1.49	2307	3.43	3.46	1.43
B+, A-	1390	4.32	4.19	1.44	2017	3.56	3.48	1.46
A	436	4.41	4.13	1.43	681	3.52	3.31	1.45
Eta		.130				.085		
Beta			.055				.049	
Hours work per week								
Don't work	1144	4.40	4.33	1.51	1376	3.57	3.63	1.55
5 or less	350	4.55	4.51	1.34	411	3.96	3.85	1.52
6-10	444	4.41	4.35	1.48	512	3.63	3.54	1.44
11-15	532	4.17	4.15	1.58	721	3.47	3.39	1.36
16-20	875	3.99	3.97	1.45	1141	3.28	3.26	1.39
21-25	760	3.83	3.86	1.45	870	3.19	3.19	1.36
26-30	544	3.88	3.98	1.48	495	3.27	3.33	1.37
31 or more	564	3.95	4.09	1.61	412	3.39	3.52	1.49
Don't work for money	442	4.34	4.30	1.44	467	3.46	3.47	1.48
Eta		.162				.134		
Beta			.130				.127	
R^2		.077					.075	
R^2(adj)		.071					.070	

Table 19
Days of School Skipped or "Cut" Predicted by Hours of Work, Background, and Educational Success: Multiple Classification Analyses of Males and Females in the Classes of 1985-1989

Predictor	Males number of days skipped				Females number of days skipped			
	n	x	(x adj)	sd	n	x	(x adj)	sd
Base year								
1985	6138	1.70	1.70	1.29	6899	1.52	1.54	1.10
1986	5856	1.65	1.65	1.26	6593	1.53	1.53	1.11
1987	6380	1.69	1.69	1.28	7046	1.59	1.58	1.16
1988	6630	1.71	1.71	1.31	6963	1.59	1.59	1.18
1989	6913	1.72	1.72	1.32	6983	1.57	1.57	1.16
Eta		.018				.024		
Beta			.019				.021	
Race								
Black	3118	1.57	1.53	1.22	4058	1.38	1.36	1.00
White	24803	1.68	1.70	1.26	26609	1.56	1.58	1.13
Hispanic	1862	2.01	1.91	1.59	1865	1.71	1.62	1.30
Other	2134	1.75	1.72	1.41	1952	1.69	1.64	1.32
Eta		.067				.066		
Beta			.056				.065	
College Plans								
Definitely won't	5079	1.91	1.76	1.48	5647	1.71	1.61	1.31
Probably won't	4744	1.80	1.69	1.37	4728	1.61	1.53	1.21
Probably will	7905	1.72	1.71	1.30	7158	1.62	1.58	1.20
Definitely will	14189	1.55	1.66	1.14	16951	1.46	1.54	1.01
Eta		.106				.085		
Beta			.027				.023	
Region								
South	9362	1.65	1.67	1.24	10914	1.48	1.52	1.05
NE	7138	1.70	1.72	1.30	6913	1.59	1.58	1.15
NC	8974	1.59	1.59	1.19	10086	1.49	1.48	1.05
West	6443	1.91	1.88	1.48	6571	1.79	1.74	1.37
Eta		.088				.102		
Beta			.077				.080	
Urbanicity								
Farm	862	1.63	1.61	1.30	820	1.38	1.44	.92
Country	1433	1.60	1.62	1.18	1563	1.44	1.48	.97
NonSMSA	4714	1.63	1.66	1.22	5154	1.49	1.52	1.07
NonS-R	15327	1.73	1.72	1.32	16849	1.59	1.58	1.18
Self-Rep	9581	1.71	1.71	1.31	1098	1.60	1.58	1.18
Eta		.036				.052		
Beta			.026				.033	

Table 19, cont.

Predictor	Males number of days skipped				Females number of days skipped			
	n	x	(x adj)	sd	n	x	(x adj)	sd
Parent Ed								
Low	2920	1.76	1.64	1.39	3764	1.58	1.51	1.20
2	9037	1.73	1.68	1.33	9860	1.57	1.53	1.14
3	8753	1.72	1.71	1.30	9536	1.57	1.57	1.15
4	7348	1.64	1.71	1.22	7464	1.55	1.59	1.14
High	3859	1.59	1.73	1.21	3860	1.50	1.61	1.06
Eta		.041				.019		
Beta			.020				.026	
Curriculum								
Coll prep	16922	1.54	1.63	1.12	19107	1.45	1.51	.98
General	11156	1.86	1.77	1.43	12054	1.71	1.64	1.32
Voc-Tech	3839	1.84	1.75	1.43	3323	1.61	1.59	1.22
Eta		.121				.109		
Beta			.054				.054	
Grades								
D, C-	1999	2.26	2.19	1.70	1186	2.27	2.22	1.77
C, C+	8318	1.90	1.85	1.45	6397	1.77	1.75	1.36
B-, B	11704	1.66	1.65	1.23	12515	1.60	1.58	1.16
B+, A-	7530	1.49	1.53	1.05	10857	1.42	1.43	.93
A	2366	1.40	1.51	1.07	3529	1.29	1.34	.80
Eta		.168				.176		
Beta			.136				.155	
Hours work per week								
Don't work	6292	1.55	1.572	1.18	7387	1.48	1.487	1.07
5 or less	2060	1.51	1.552	1.14	2074	1.37	1.407	.90
6-10	2516	1.56	1.587	1.17	2854	1.44	1.467	.98
11-15	3126	1.66	1.691	1.22	4098	1.49	1.509	1.02
16-20	5115	1.70	1.703	1.27	6280	1.58	1.580	1.14
21-25	4386	1.79	1.771	1.34	4625	1.71	1.683	1.26
26-30	3013	1.89	1.840	1.40	2589	1.76	1.725	1.34
31 or more	3262	2.00	1.932	1.57	2160	1.83	1.778	1.44
Don't work for money	2147	1.56	1.590	1.15	2417	1.45	1.474	1.04
Eta		.122				.114		
Beta			.094				.093	
R^2		.054				.059		
R^2(adj)		.053				.058		

Table 20
Evenings Out for Fun and Recreation Predicted by Hours of Work, Background, and Educational Success: Multiple Classification Analyses of Males and Females in the Classes of 1985-1989

Predictor	Males number of evenings out				Females number of evenings out			
	n	x	(x adj)	sd	n	x	(x adj)	sd
Base year								
1985	6401	3.62	3.61	1.31	7229	3.37	3.36	1.28
1986	6110	3.60	3.59	1.31	6892	3.37	3.36	1.30
1987	6588	3.61	3.62	1.29	7397	3.38	3.36	1.29
1988	6914	3.65	3.66	1.28	7314	3.39	3.40	1.29
1989	7144	3.64	3.65	1.30	7307	3.34	3.36	1.30
Eta		.014				.013		
Beta			.019				.014	
Race								
Black	3283	3.55	3.49	1.40	4291	2.94	2.92	1.31
White	25698	3.67	3.68	1.27	27807	3.49	3.49	1.25
Hispanic	1949	3.41	3.44	1.29	1986	3.02	3.03	1.32
Other	2227	3.36	3.40	1.41	2055	2.95	2.97	1.37
Eta		.075				.172		
Beta			.074				.172	
College Plans								
Definitely won't	5282	3.77	3.71	1.44	5922	3.46	3.42	1.42
Probably won't	4931	3.73	3.68	1.31	4936	3.42	3.40	1.35
Probably will	8222	3.61	3.60	1.28	7507	3.39	3.39	1.30
Definitely will	14722	3.54	3.587	1.23	17774	3.31	3.333	1.21
Eta		.073				.045		
Beta			.037				.028	
Region								
South	9751	3.59	3.60	1.30	11485	3.26	3.33	1.30
NE	7481	3.69	3.68	1.33	7308	3.46	3.44	1.32
NC	9239	3.71	3.69	1.27	10478	3.47	3.42	1.27
West	6686	3.50	3.51	1.28	6868	3.32	3.30	1.26
Eta		.062				.074		
Beta			.051				.043	
Urbanicity								
Farm	898	3.42	3.36	1.30	854	3.14	3.10	1.23
Country	1487	3.48	3.43	1.30	1624	3.17	3.16	1.34
NonSMSA	4873	3.71	3.69	1.32	5372	3.36	3.33	1.30
NonS-R	15883	3.62	3.64	1.28	17665	3.41	3.42	1.27
Self-Rep	10016	3.64	3.65	1.30	10624	3.38	3.39	1.31
Eta		.050				.055		
Beta			.060				.063	

Table 20, cont.

Predictor	Males number of evenings out				Females number of evenings out			
	n	x	(x adj)	sd	n	x	(x adj)	sd
Parent Ed								
Low	3043	3.51	3.53	1.44	3939	3.14	3.23	1.41
2	9331	3.69	3.65	1.34	10350	3.41	3.39	1.33
3	9090	3.65	3.64	1.27	9990	3.40	3.39	1.28
4	7617	3.59	3.62	1.23	7819	3.41	3.40	1.23
High	4016	3.56	3.63	1.24	4041	3.34	3.36	1.18
Eta		.045				.068		
Beta			.025				.039	
Curriculum								
Coll prep	17567	3.54	3.57	1.22	20049	3.32	3.32	1.21
General	11613	3.70	3.67	1.36	12617	3.45	3.45	1.36
Voc-Tech	3977	3.76	3.72	1.38	3473	3.34	3.37	1.40
Eta		.072				.048		
Beta			.046				.047	
Grades								
D, C-	2074	3.80	3.75	1.48	1251	3.54	3.54	1.49
C, C+	8671	3.75	3.73	1.32	6696	3.46	3.46	1.35
B-, B	12182	3.65	3.65	1.26	13120	3.41	3.40	1.30
B+, A-	7765	3.49	3.52	1.26	11419	3.31	3.32	1.25
A	2465	3.36	3.40	1.30	3653	3.20	3.21	1.22
Eta		.099				.067		
Beta			.079				.062	
Hours work per week								
Don't work	6566	3.59	3.64	1.38	7776	3.28	3.35	1.34
5 or less	2160	3.62	3.67	1.27	2176	3.25	3.29	1.25
6-10	2614	3.60	3.63	1.27	2993	3.35	3.36	1.22
11-15	3241	3.67	3.68	1.23	4293	3.47	3.43	1.22
16-20	5284	3.71	3.69	1.23	6564	3.50	3.46	1.26
21-25	4568	3.64	3.60	1.24	4851	3.48	3.43	1.26
26-30	3126	3.66	3.62	1.28	2710	3.30	3.26	1.31
31 or more	3392	3.57	3.51	1.38	2266	3.28	3.27	1.41
Don't work for money	2206	3.53	3.57	1.33	2510	3.22	3.28	1.31
Eta		.040				.080		
Beta			.040				.053	
R^2		.027					.050	
R^2(adj)		.026					.049	

Table 21
Evenings Out on a Date Predicted by Hours of Work, Background, and Educational Success: Multiple Classification Analyses of Males and Females in the Classes of 1985-1989

Predictor	Males n	Males x	Males number of dates (x adj)	Males sd	Females n	Females x	Females number of dates (x adj)	Females sd
Base year								
1985	6303	3.40	3.42	1.54	7258	3.64	3.64	1.63
1986	6041	3.41	3.41	1.55	6829	3.63	3.62	1.63
1987	6514	3.42	3.42	1.54	7342	3.65	3.63	1.64
1988	6836	3.38	3.38	1.55	7237	3.60	3.61	1.67
1989	7065	3.45	3.44	1.57	7254	3.59	3.60	1.65
Eta		.015				.015		
Beta			.012				.010	
Race								
Black	3200	3.12	3.13	1.494	4228	3.16	3.12	1.58
White	25441	3.49	3.48	1.540	27594	3.74	3.74	1.62
Hispanic	1914	3.29	3.38	1.545	1965	3.25	3.29	1.69
Other	2204	2.98	3.05	1.640	2033	3.22	3.28	1.76
Eta		.105				.140		
Beta			.091				.139	
College Plans								
Definitely won't	5204	3.53	3.46	1.67	5872	3.93	3.86	1.71
Probably won't	4850	3.48	3.42	1.56	4889	3.83	3.79	1.66
Probably will	8130	3.33	3.33	1.50	7430	3.55	3.54	1.64
Definitely will	14575	3.38	3.44	1.53	17629	3.48	3.52	1.60
Eta		.045				.112		
Beta			.029				.086	
Region								
South	9644	3.43	3.460	1.51	11410	3.64	3.726	1.61
NE	7334	3.45	3.430	1.62	7179	3.69	3.642	1.69
NC	9155	3.45	3.421	1.55	10414	3.63	3.560	1.64
West	6626	3.28	3.292	1.54	6817	3.51	3.502	1.64
Eta		.041				.034		
Beta			.038				.052	
Urbanicity								
Farm	887	3.36	3.27	1.55	850	3.56	3.48	1.62
Country	1479	3.31	3.28	1.51	1613	3.58	3.52	1.65
NonSMSA	4834	3.45	3.45	1.54	5337	3.63	3.60	1.64
NonS-R	15702	3.43	3.43	1.54	17542	3.63	3.63	1.63
Self-Rep	9857	3.37	3.40	1.59	10478	3.62	3.66	1.68
Eta		.026				.010		
Beta			.032				.026	

Table 21, cont.

Predictor	Males n	Males x	Males number of dates (x adj)	Males sd	Females n	Females x	Females number of dates (x adj)	Females sd
Parent Ed								
Low	2995	3.22	3.23	1.57	3896	3.44	3.45	1.74
2	9278	3.44	3.40	1.59	10258	3.73	3.66	1.66
3	8973	3.47	3.45	1.54	9914	3.68	3.68	1.62
4	7547	3.41	3.44	1.52	7753	3.59	3.63	1.61
High	3966	3.36	3.45	1.53	3999	3.41	3.55	1.60
Eta		.046				.070		
Beta			.041				.045	
Curriculum								
Coll prep	17382	3.37	3.39	1.51	19887	3.51	3.57	1.61
General	11467	3.40	3.39	1.59	12489	3.73	3.67	1.68
Voc-Tech	3910	3.60	3.53	1.60	3444	3.81	3.71	1.66
Eta\		.049				.072		
Beta			.031				.034	
Grades								
D, C-	2038	3.37	3.38	1.66	1237	3.68	3.62	1.72
C, C+	8551	3.44	3.43	1.57	6627	3.71	3.66	1.69
B-, B	12016	3.49	3.48	1.53	13009	3.69	3.67	1.64
B+, A-	7704	3.34	3.35	1.53	11326	3.57	3.60	1.62
A	2450	3.17	3.23	1.56	3621	3.37	3.46	1.62
Eta		.058				.061		
Beta			.047				.038	
Hours work per week								
Don't work	6482	3.11	3.15	1.59	7699	3.38	3.44	1.71
5 or less	2139	3.21	3.22	1.52	2150	3.30	3.35	1.64
6-10	2582	3.39	3.40	1.54	2953	3.45	3.48	1.63
11-15	3203	3.42	3.41	1.51	4261	3.66	3.64	1.61
16-20	5206	3.46	3.44	1.51	6512	3.77	3.74	1.60
21-25	4522	3.58	3.56	1.53	4812	3.91	3.86	1.57
26-30	3085	3.70	3.68	1.50	2692	3.91	3.86	1.54
31 or more	3353	3.76	3.75	1.54	2251	3.85	3.81	1.66
Don't work for money	2187	3.14	3.16	1.51	2490	3.40	3.44	1.64
Eta		.146				.137		
Beta			.132				.110	
R^2		.038					.053	
R^2(adj)		.037					.052	

Table 22
Satisfaction with Life as a Whole Predicted by Hours of Work, Background, and Educational Success: Multiple Classification Analyses of Males and Females in the Classes of 1985-1989

Predictor	Males Satisfied with Life				Females Satisfied with Life			
	n	x	(x adj)	sd	n	x	(x adj)	sd
Base year								
1985	1198	5.34	5.35	1.39	1423	5.22	5.21	1.54
1986	1185	5.19	5.19	1.44	1365	4.99	5.00	1.56
1987	1278	5.21	5.21	1.45	1422	4.98	4.98	1.52
1988	1326	5.18	5.18	1.50	1408	5.00	5.00	1.56
1989	1160	5.23	5.22	1.39	1169	5.05	5.05	1.51
Eta		.040				.059		
Beta			.043				.055	
Race								
Black	561	5.05	5.09	1.63	822	4.95	5.02	1.75
White	4825	5.28	5.27	1.39	5228	5.09	5.08	1.47
Hispanic	352	5.08	5.15	1.57	362	4.81	4.88	1.80
Other	409	4.97	4.96	1.54	375	4.84	4.84	1.68
Eta		.073				.060		
Beta			.064				.046	
College Plans								
Definitely won't	939	5.04	5.13	1.68	1164	5.00	5.12	1.60
Probably won't	843	5.17	5.24	1.45	897	5.00	5.08	1.58
Probably will	1490	5.13	5.14	1.42	1309	4.87	4.89	1.55
Definitely will	2875	5.36	5.31	1.33	3417	5.15	5.07	1.50
Eta		.090				.070		
Beta			.054				.050	
Region								
South	1781	5.23	5.23	1.48	2184	5.07	5.06	1.59
NE	1364	5.22	5.21	1.45	1338	5.01	5.00	1.60
NC	1727	5.26	5.26	1.39	2002	5.04	5.03	1.48
West	1275	5.19	5.20	1.42	1263	5.07	5.11	1.49
Eta		.017				.014		
Beta			.014				.022	
Urbanicity								
Farm	173	5.32	5.35	1.53	159	4.98	4.95	1.46
Country	258	5.16	5.15	1.48	305	5.03	5.02	1.63
NonSMSA	924	5.27	5.26	1.43	1036	5.10	5.08	1.47
NonS-R	3012	5.24	5.23	1.44	3314	5.08	5.08	1.52
Self-Rep	1780	5.18	5.20	1.42	1973	4.96	4.99	1.62
Eta		.027				.035		
Beta			.025				.028	

Table 22, cont.

Predictor	Males Satisfied with Life n	x	(x adj)	sd	Females Satisfied with Life n	x	(x adj)	sd
Parent Ed								
Low	503	5.11	5.21	1.63	759	4.85	4.94	1.71
2	1695	5.15	5.19	1.47	1931	5.07	5.09	1.54
3	1734	5.23	5.23	1.44	1884	5.00	5.00	1.56
4	1462	5.30	5.25	1.35	1418	5.09	5.05	1.48
High	753	5.38	5.29	1.35	795	5.25	5.15	1.39
Eta		.057				.066		
Beta			.021				.040	
Curriculum								
Coll prep	3348	5.32	5.24	1.34	3792	5.14	5.07	1.48
General	2094	5.16	5.25	1.52	2314	4.90	4.99	1.64
Voc-Tech	705	5.05	5.15	1.56	681	5.07	5.13	1.53
Eta		.068				.072		
Beta			.023				.032	
Grades								
D, C-	370	4.70	4.76	1.58	234	4.39	4.44	1.79
C, C+	1511	5.10	5.15	1.53	1230	4.78	4.81	1.67
B-, B	2308	5.28	5.28	1.43	2432	5.05	5.07	1.56
B+, A-	1475	5.34	5.31	1.33	2202	5.17	5.15	1.44
A	483	5.44	5.36	1.26	689	5.33	5.27	1.38
Eta		.116				.131		
Beta			.093				.115	
Hours work per week								
Don't work	1298	5.24	5.24	1.48	1544	5.09	5.11	1.57
5 or less	387	5.25	5.22	1.52	395	5.02	4.95	1.54
6-10	513	5.40	5.37	1.37	555	5.17	5.14	1.46
11-15	624	5.22	5.17	1.42	836	5.06	5.03	1.53
16-20	994	5.16	5.16	1.37	1253	5.05	5.05	1.51
21-25	787	5.25	5.26	1.41	879	5.03	5.05	1.53
26-30	582	5.22	5.27	1.45	475	4.92	4.94	1.56
31 or more	564	5.08	5.15	1.49	378	4.65	4.70	1.67
Don't work for money	398	5.32	5.29	1.44	472	5.21	5.18	1.51
Eta		.053				.076		
Beta			.043				.069	
R^2		.027					.034	
R^2(adj)		.021					.029	

Table 23
Satisfaction with Self Predicted by Hours of Work, Background, and Educational Success: Multiple Classification Analyses of Males and Females in the Classes of 1985-1989

Predictor	Males Satisfied with Self				Females Satisfied with Self			
	n	x	(x adj)	sd	n	x	(x adj)	sd
Base year								
1985	1190	5.71	5.71	1.38	1419	5.40	5.39	1.49
1986	1183	5.48	5.49	1.56	1364	5.22	5.24	1.56
1987	1269	5.54	5.54	1.52	1414	5.18	5.20	1.50
1988	1322	5.54	5.54	1.45	1403	5.24	5.24	1.57
1989	1160	5.58	5.59	1.44	1168	5.29	5.27	1.54
Eta		.052				.049		
Beta			.051				.042	
Race								
Black	556	5.87	5.87	1.61	813	5.78	5.82	1.62
White	4812	5.55	5.55	1.44	5221	5.18	5.17	1.50
Hispanic	349	5.56	5.60	1.58	360	5.52	5.55	1.68
Other	407	5.50	5.49	1.55	374	5.22	5.18	1.49
Eta		.063				.130		
Beta			.064				.141	
College Plans								
Definitely won't	935	5.63	5.64	1.64	1161	5.31	5.35	1.62
Probably won't	837	5.64	5.65	1.46	890	5.35	5.36	1.50
Probably will	1484	5.48	5.48	1.43	1307	5.10	5.12	1.53
Definitely will	2868	5.58	5.57	1.43	3410	5.29	5.27	1.51
Eta		.040				.054		
Beta			.041				.053	
Region								
South	1770	5.62	5.59	1.50	2180	5.32	5.24	1.61
NE	1369	5.50	5.50	1.51	1333	5.24	5.26	1.49
NC	1717	5.57	5.59	1.42	1993	5.20	5.24	1.48
West	1268	5.57	5.60	1.45	1262	5.30	5.36	1.50
Eta		.028				.033		
Beta			.027				.029	
Urbanicity								
Farm	171	5.72	5.69	1.54	160	5.08	5.12	1.59
Country	256	5.64	5.63	1.47	301	5.26	5.26	1.57
NonSMSA	918	5.52	5.51	1.52	1034	5.36	5.38	1.48
NonS-R	3000	5.56	5.56	1.46	3305	5.24	5.23	1.55
Self-Rep	1779	5.59	5.61	1.45	1968	5.28	5.27	1.54
Eta		.030				.038		
Beta			.030				.039	

Table 23, cont.

Predictor	Males Satisfied with Self				Females Satisfied with Self			
	n	x	(x adj)	sd	n	x	(x adj)	sd
Parent Ed								
Low	498	5.57	5.51	1.64	756	5.33	5.22	1.64
2	1690	5.60	5.58	1.50	1923	5.29	5.29	1.57
3	1727	5.56	5.57	1.48	1879	5.20	5.22	1.53
4	1453	5.55	5.57	1.43	1416	5.28	5.31	1.45
High	756	5.57	5.59	1.32	794	5.26	5.29	1.45
Eta		.012				.029		
Beta			.013				.026	
Curriculum								
Coll prep	3333	5.56	5.57	1.38	3787	5.26	5.25	1.47
General	2088	5.57	5.57	1.57	2304	5.23	5.26	1.61
Voc-Tech	703	5.63	5.59	1.56	677	5.44	5.39	1.61
Eta		.016				.040		
Beta			.006				.028	
Grades								
D, C-	368	5.30	5.26	1.72	231	4.76	4.69	1.81
C, C+	1509	5.57	5.54	1.57	1223	5.16	5.08	1.65
B-, B	2299	5.59	5.60	1.46	2425	5.27	5.27	1.56
B+, A-	1467	5.61	5.64	1.36	2201	5.35	5.38	1.42
A	481	5.58	5.59	1.35	688	5.32	5.40	1.46
Eta		.047				.075		
Beta			.057				.100	
Hours work per week								
Don't work	1289	5.60	5.59	1.47	1542	5.40	5.36	1.56
5 or less	387	5.59	5.59	1.49	391	5.21	5.19	1.63
6-10	507	5.63	5.64	1.42	554	5.29	5.29	1.49
11-15	626	5.49	5.48	1.47	833	5.19	5.22	1.47
16-20	988	5.50	5.52	1.41	1249	5.22	5.25	1.51
21-25	782	5.58	5.59	1.47	877	5.24	5.28	1.49
26-30	583	5.52	5.52	1.56	478	5.23	5.24	1.53
31 or more	564	5.69	5.67	1.54	376	5.14	5.12	1.69
Don't work for money	398	5.56	5.57	1.42	468	5.27	5.25	1.51
Eta		.040				.052		
Beta			.037				.041	
R^2		.014					.036	
R^2(adj)		.008					.031	

Table 24
Satisfaction with Amount of Fun Predicted by Hours of Work, Background, and Educational Success: Multiple Classification Analyses of Males and Females in the Classes of 1985-1989

Predictor	Males Satisfied with Fun				Females Satisfied with Fun			
	n	x	(x adj)	sd	n	x	(x adj)	sd
Base year								
1985	1203	5.32	5.32	1.52	1428	5.21	5.20	1.65
1986	1188	5.23	5.22	1.57	1370	5.07	5.06	1.63
1987	1284	5.18	5.17	1.58	1423	5.00	4.99	1.66
1988	1331	5.20	5.21	1.55	1411	5.01	5.03	1.77
1989	1164	5.10	5.11	1.59	1172	5.01	5.03	1.65
Eta		.044				.049		
Beta			.043				.045	
Race								
Black	565	5.02	5.03	1.78	825	4.83	4.86	1.92
White	4840	5.26	5.25	1.52	5240	5.13	5.12	1.60
Hispanic	355	5.13	5.20	1.68	362	4.90	4.97	1.95
Other	410	4.89	4.89	1.67	377	4.77	4.80	1.80
Eta		.071				.076		
Beta			.066				.065	
College Plans								
Definitely won't	941	5.21	5.22	1.72	1171	5.10	5.17	1.73
Probably won't	849	5.20	5.20	1.57	898	5.06	5.13	1.75
Probably will	1496	5.15	5.15	1.56	1313	4.98	4.99	1.64
Definitely will	2884	5.23	5.23	1.51	3422	5.08	5.03	1.64
Eta		.020				.024		
Beta			.022				.039	
Region								
South	1787	5.12	5.13	1.67	2193	4.97	5.01	1.81
NE	1376	5.22	5.23	1.56	1339	5.13	5.09	1.61
NC	1729	5.29	5.27	1.47	2006	5.14	5.11	1.60
West	1278	5.19	5.20	1.51	1266	5.04	5.06	1.59
Eta		.043				.044		
Beta			.035				.025	
Urbanicity								
Farm	174	5.21	5.25	1.63	160	4.92	4.91	1.75
Country	258	5.21	5.18	1.61	305	4.94	4.95	1.74
NonSMSA	926	5.19	5.16	1.60	1037	5.14	5.12	1.69
NonS-R	3023	5.24	5.25	1.54	3322	5.05	5.05	1.66
Self-Rep	1789	5.14	5.15	1.57	1980	5.08	5.08	1.67
Eta		.027				.031		
Beta			.029				.028	

Table 24, cont.

Predictor	Males Satisfied with Fun				Females Satisfied with Fun			
	n	x	(x adj)	sd	n	x	(x adj)	sd
Parent Ed								
Low	504	4.99	5.03	1.78	759	4.82	4.88	1.92
2	1707	5.22	5.22	1.60	1937	5.09	5.09	1.69
3	1737	5.25	5.25	1.54	1888	5.07	5.07	1.64
4	1465	5.21	5.20	1.52	1424	5.09	5.08	1.60
High	757	5.21	5.21	1.41	796	5.17	5.14	1.56
Eta		.044				.057		
Beta			.036				.042	
Curriculum								
Coll prep	3357	5.20	5.19	1.49	3797	5.12	5.10	1.58
General	2104	5.21	5.23	1.66	2325	4.97	4.98	1.78
Voc-Tech	709	5.21	5.23	1.62	682	5.09	5.12	1.76
Eta		.002				.041		
Beta			.014				.035	
Grades								
D, C-	371	5.14	5.16	1.74	235	4.75	4.79	2.00
C, C+	1521	5.21	5.22	1.61	1237	5.02	5.06	1.78
B-, B	2316	5.27	5.27	1.53	2435	5.10	5.11	1.68
B+, A-	1478	5.14	5.13	1.55	2207	5.09	5.07	1.58
A	484	5.14	5.11	1.50	690	4.99	4.95	1.65
Eta		.035				.043		
Beta			.038				.042	
Hours work per week								
Don't work	1301	5.22	5.27	1.60	1550	5.14	5.18	1.73
5 or less	389	5.26	5.26	1.56	396	4.94	4.93	1.68
6-10	513	5.36	5.37	1.52	555	5.25	5.23	1.52
11-15	628	5.19	5.17	1.47	837	5.19	5.16	1.59
16-20	997	5.17	5.15	1.54	1258	5.09	5.07	1.62
21-25	790	5.23	5.20	1.51	880	4.99	4.97	1.67
26-30	585	5.15	5.15	1.58	477	4.94	4.94	1.73
31 or more	567	5.02	5.01	1.73	379	4.60	4.63	1.84
Don't work for money	400	5.32	5.32	1.51	472	5.02	5.03	1.69
Eta		.055				.087		
Beta			.059				.086	
R^2		.015					.022	
R^2(adj)		.010					.017	

Table 25
Satisfaction with Leisure Time Predicted by Hours of Work, Background, and Educational Success: Multiple Classification Analyses of Males and Females in the Classes of 1985-1989

Predictor	Males Satisfaction with Leisure Time				Females Satisfaction with Leisure Time			
	n	x	(x adj)	sd	n	x	(x adj)	sd
Base year								
1985	1204	4.50	4.49	1.93	1427	4.20	4.17	1.90
1986	1187	4.39	4.37	1.87	1367	4.24	4.22	1.91
1987	1282	4.35	4.34	1.83	1423	4.08	4.09	1.91
1988	1328	4.40	4.41	1.85	1408	4.12	4.15	1.86
1989	1161	4.24	4.29	1.89	1168	4.03	4.05	1.90
Eta		.044				.040		
Beta			.035				.032	
Race								
Black	564	4.45	4.47	1.94	824	3.97	3.95	2.08
White	4834	4.38	4.38	1.86	5232	4.19	4.19	1.84
Hispanic	354	4.38	4.47	2.04	360	4.07	4.09	2.08
Other	410	4.22	4.19	1.84	377	3.88	3.88	1.98
Eta		.024				.051		
Beta			.032				.053	
College Plans								
Definitely won't	939	4.32	4.41	2.03	1170	4.16	4.17	1.98
Probably won't	849	4.36	4.42	1.93	893	4.12	4.17	1.95
Probably will	1496	4.37	4.35	1.82	1311	4.10	4.10	1.87
Definitely will	2878	4.41	4.37	1.83	3419	4.15	4.13	1.86
Eta		.018				.011		
Beta			.014				.012	
Region								
South	1784	4.20	4.19	1.98	2190	4.03	4.02	1.98
NE	1373	4.48	4.50	1.82	1338	4.21	4.22	1.89
NC	1728	4.46	4.46	1.82	2000	4.26	4.25	1.83
West	1277	4.44	4.44	1.82	1265	4.07	4.09	1.83
Eta		.065				.054		
Beta			.069				.051	
Urbanicity								
Farm	173	4.38	4.56	2.03	160	4.03	3.96	1.89
Country	258	4.46	4.46	1.96	304	4.03	4.00	2.05
NonSMSA	926	4.44	4.40	1.82	1037	4.19	4.14	1.94
NonS-R	3021	4.37	4.38	1.87	3316	4.13	4.16	1.87
Self-Rep	1784	4.33	4.30	1.89	1976	4.15	4.15	1.88
Eta		.022				.020		
Beta			.031				.026	

Table 25, cont.

Predictor	Males Satisfaction with Leisure Time n	x	(x adj)	sd	Females Satisfaction with Leisure Time n	x	(x adj)	sd
Parent Ed								
Low	503	4.07	4.10	2.11	757	3.95	3.99	2.02
2	1703	4.36	4.38	1.93	1933	4.20	4.20	1.95
3	1735	4.47	4.47	1.81	1887	4.12	4.14	1.87
4	1465	4.37	4.35	1.85	1421	4.15	4.13	1.82
High	756	4.46	4.42	1.71	795	4.21	4.15	1.81
Eta		.057				.042		
Beta			.053				.033	
Curriculum								
Coll prep	3355	4.40	4.37	1.79	3795	4.13	4.10	1.83
General	2100	4.39	4.41	1.96	2320	4.15	4.18	1.97
Voc-Tech	707	4.26	4.32	1.99	678	4.13	4.22	2.00
Eta		.025				.004		
Beta			.015				.024	
Grades								
D, C-	368	4.19	4.22	2.02	233	3.97	3.97	2.13
C, C+	1519	4.37	4.41	1.95	1234	4.09	4.09	1.94
B-, B	2313	4.50	4.51	1.84	2433	4.20	4.21	1.93
B+, A-	1479	4.31	4.30	1.82	2203	4.14	4.14	1.83
A	483	4.17	4.02	1.83	690	4.03	4.00	1.83
Eta		.060				.033		
Beta			.076				.039	
Hours work per week								
Don't work	1300	4.74	4.78	1.86	1548	4.51	4.56	1.91
5 or less	388	4.59	4.61	1.79	396	4.18	4.20	1.77
6-10	512	4.57	4.59	1.78	554	4.35	4.35	1.77
11-15	626	4.49	4.47	1.85	837	4.31	4.27	1.84
16-20	997	4.33	4.30	1.79	1255	4.05	4.03	1.85
21-25	790	4.29	4.26	1.84	878	3.76	3.74	1.88
26-30	583	3.76	3.74	1.95	478	3.61	3.60	1.84
31 or more	566	3.89	3.88	1.95	376	3.44	3.44	1.96
Don't work for money	400	4.50	4.52	1.83	471	4.24	4.27	1.94
Eta		.167				.171		
Beta			.177				.181	
R^2		.044					.041	
R^2(adj)		.039					.036	

Table 26
Satisfaction with Job Predicted by Hours of Work, Background, and Educational Success: Multiple Classification Analyses of Males and Females in the Classes of 1985-1989

Predictor	Males n	Males Satisfaction with Job x	Males (x adj)	Males sd	Females n	Females Satisfaction with Job x	Females (x adj)	Females sd
Base year								
1985	821	4.85	4.85	1.77	876	4.78	4.77	1.77
1986	810	4.88	4.86	1.65	885	4.74	4.75	1.68
1987	878	4.82	4.82	1.70	971	4.71	4.71	1.72
1988	926	4.74	4.77	1.71	934	4.84	4.83	1.76
1989	846	4.79	4.78	1.68	797	4.68	4.68	1.78
Eta		.028				.032		
Beta			.022				.030	
Race								
Black	317	4.47	4.51	1.72	428	4.40	4.45	1.84
White	3506	4.86	4.85	1.71	3610	4.79	4.78	1.71
Hispanic	218	4.69	4.78	1.65	202	4.74	4.88	1.99
Other	240	4.73	4.68	1.61	223	4.67	4.71	1.75
Eta		.062				.066		
Beta			.055				.057	
College Plans								
Definitely won't	674	4.84	4.84	1.82	741	4.78	4.88	1.82
Probably won't	626	4.82	4.86	1.65	594	4.65	4.74	1.81
Probably will	1026	4.79	4.82	1.67	854	4.59	4.60	1.67
Definitely will	1955	4.81	4.78	1.69	2274	4.82	4.76	1.72
Eta		.008				.053		
Beta			.017				.050	
Region								
South	1143	4.82	4.81	1.70	1250	4.74	4.78	1.77
NE	1004	4.88	4.89	1.67	974	4.77	4.76	1.75
NC	1254	4.80	4.80	1.73	1409	4.78	4.76	1.69
West	880	4.75	4.75	1.72	830	4.68	4.66	1.77
Eta		.024				.021		
Beta			.026				.024	
Urbanicity								
Farm	132	5.38	5.35	1.64	84	5.09	5.09	1.53
Country	179	4.62	4.60	1.69	160	4.70	4.73	1.77
NonSMSA	598	4.81	4.82	1.66	639	4.71	4.70	1.66
NonS-R	2122	4.81	4.82	1.71	2198	4.76	4.76	1.78
Self-Rep	1250	4.75	4.74	1.72	1382	4.72	4.72	1.74
Eta		.081				.036		
Beta			.079				.036	

Table 26, cont.

Predictor	Males Satisfaction with Job n	x	(x adj)	sd	Females Satisfaction with Job n	x	(x adj)	sd
Parent Ed								
Low	332	4.78	4.77	1.79	464	4.55	4.57	1.82
2	1199	4.79	4.77	1.73	1239	4.73	4.73	1.77
3	1265	4.75	4.75	1.69	1304	4.73	4.73	1.73
4	1009	4.88	4.90	1.67	963	4.79	4.79	1.73
High	476	4.95	4.95	1.64	493	4.99	4.95	1.62
Eta		.039				.061		
Beta			.043				.052	
Curriculum								
Coll prep	2283	4.85	4.84	1.67	2519	4.84	4.82	1.69
General	1472	4.74	4.77	1.73	1471	4.61	4.65	1.82
Voc-Tech	526	4.87	4.82	1.75	473	4.72	4.73	1.75
Eta		.033				.060		
Beta			.018				.045	
Grades								
D, C-	252	4.72	4.72	1.85	149	4.46	4.54	1.79
C, C+	1054	4.72	4.73	1.75	755	4.60	4.67	1.85
B-, B	1689	4.79	4.79	1.67	1664	4.73	4.74	1.76
B+, A-	1009	4.96	4.95	1.67	1461	4.83	4.80	1.69
A	277	4.86	4.85	1.63	434	4.91	4.83	1.60
Eta		.052				.061		
Beta			.049				.036	
Hours work per week								
Don't work	199	4.69	4.69	1.72	142	4.19	4.26	1.41
5 or less	223	4.85	4.83	1.59	206	4.61	4.56	1.83
6-10	413	4.94	4.92	1.64	440	4.79	4.74	1.69
11-15	564	4.62	4.60	1.77	765	4.67	4.64	1.71
16-20	921	4.73	4.72	1.67	1186	4.86	4.85	1.72
21-25	761	4.93	4.94	1.69	853	4.74	4.76	1.76
26-30	563	4.75	4.79	1.74	453	4.77	4.81	1.83
31 or more	524	5.05	5.05	1.70	324	4.78	4.85	1.86
Don't work for money	113	4.44	4.40	1.66	94	4.71	4.73	1.64
Eta		.088				.072		
Beta			.093				.072	
R^2		.024					.021	
R^2(adj)		.016					.013	

Table 27
Self-Esteem Predicted by Hours of Work,
Background, and Educational Success: Multiple
Classification Analyses of Males and Females in the Classes of 1985-1989

Predictor	Males Self Esteem				Females Self Esteem			
	n	x	(x adj)	sd	n	x	(x adj)	sd
Base year								
1985	1281	4.11	4.10	.66	1398	4.02	4.02	.76
1986	1172	4.06	4.07	.70	1369	3.98	4.00	.73
1987	1296	4.09	4.09	.67	1456	4.00	4.00	.76
1988	1350	4.11	4.11	.71	1421	3.99	3.98	.77
1989	1196	4.16	4.16	.68	1189	3.99	3.98	.77
Eta		.047				.016		
Beta			.039				.019	
Race								
Black	621	4.17	4.24	.68	797	4.21	4.27	.71
White	4901	4.11	4.10	.68	5271	3.97	3.96	.76
Hispanic	344	4.12	4.14	.69	369	4.05	4.10	.74
Other	429	4.00	3.97	.73	396	3.88	3.88	.85
Eta		.052				.105		
Beta			.080				.134	
College Plans								
Definitely won't	1024	3.97	4.02	.72	1092	3.84	3.95	.81
Probably won't	926	3.99	4.02	.67	931	3.89	3.96	.76
Probably will	1515	4.03	4.03	.70	1384	3.90	3.92	.78
Definitely will	2830	4.25	4.22	.63	3426	4.12	4.06	.71
Eta		.186				.161		
Beta			.140				.077	
Region								
South	1853	4.10	4.09	.68	2151	4.03	4.01	.74
NE	1427	4.13	4.12	.71	1363	3.99	3.98	.71
NC	1785	4.08	4.08	.69	1986	3.96	3.98	.75
West	1230	4.13	4.15	.66	1333	4.01	4.03	.79
Eta		.027				.039		
Beta			.040				.028	
Urbanicity								
Farm	183	4.08	4.16	.69	167	3.97	4.01	.78
Country	300	4.11	4.14	.64	301	4.01	4.04	.69
NonSMSA	937	4.13	4.14	.66	996	3.96	3.97	.76
NonS-R	2984	4.10	4.09	.69	3366	4.00	3.99	.76
Self-Rep	1891	4.10	4.09	.70	2003	4.02	4.02	.77
Eta		.016				.029		
Beta			.034				.025	

Table 27, cont.

Predictor	Males Self Esteem				Females Self Esteem			
	n	x	(x adj)	sd	n	x	(x adj)	sd
Parent Ed								
Low	586	4.03	4.08	.68	718	3.94	3.98	.80
2	1779	4.09	4.13	.70	1964	3.92	3.96	.77
3	1720	4.12	4.12	.66	1853	4.00	4.00	.75
4	1435	4.13	4.08	.68	1574	4.06	4.03	.73
High	775	4.15	4.06	.70	724	4.16	4.08	.70
Eta		.049				.010		
Beta			.039				.048	
Curriculum								
Coll prep	3315	4.20	4.12	.65	3803	4.09	4.03	.71
General	2186	4.01	4.08	.70	2394	3.88	3.95	.80
Voc-Tech	794	4.04	4.11	.71	636	3.94	3.99	.78
Eta		.132				.132		
Beta			.029				.046	
Grades								
D, C-	400	3.78	3.84	.79	245	3.61	3.67	.91
C, C+	1688	3.98	4.01	.70	1280	3.80	3.84	.79
B-, B	2345	4.14	4.13	.65	2465	3.97	3.98	.76
B+, A-	1440	4.23	4.20	.63	2126	4.12	4.10	.69
A	422	4.32	4.26	.67	717	4.16	4.11	.71
Eta		.193				.187		
Beta			.149				.151	
Hours work per week								
Don't work	1186	4.15	4.13	.70	1471	3.99	3.96	.78
5 or less	416	4.16	4.12	.66	387	4.08	4.05	.71
6-10	490	4.13	4.11	.63	550	4.05	4.02	.69
11-15	624	4.14	4.12	.67	834	4.02	4.02	.74
16-20	1002	4.09	4.09	.67	1243	3.98	3.98	.75
21-25	911	4.06	4.08	.71	931	3.94	3.97	.80
26-30	567	4.08	4.12	.68	505	4.01	4.06	.75
31 or more	676	4.06	4.12	.68	420	3.95	4.00	.82
Don't work for money	423	4.09	4.08	.72	492	4.03	4.02	.74
Eta		.049				.050		
Beta			.028				.041	
R^2		.066					.068	
R^2(adj)		.060					.063	

Table 28
Summary of Linear and Non-Linear Relationships
with Hours of Part-Time Work

	Males				Females			
	Nonworkers Included		Nonworkers Excluded		Nonworkers Included		Nonworkers Excluded	
Dependent Variable	r	Eta	r	Eta	r	Eta	r	Eta
Problem Behavior:								
1/2 pack or more cigarette use	.130	.141	.133	.136	.111	.124	.125	.126
Continuous[a]	*.142*	*.149*	*.133*	*.137*	*.129*	*.139*	*.133*	*.135*
Monthly alcohol use	.104	.109	.062	.068	.120	.137	.057	.083
Continuous[a]	*.122*	*.124*	*.098*	*.102*	*.122*	*.130*	*.081*	*.094*
Heavy alcohol use in past 2 weeks	.101	.101	.074	.075	.091	.093	.059	.062
Continuous[a]	*.107*	*.111*	*.088*	*.093*	*.089*	*.090*	*.076*	*.077*
Monthly marijuana use	.061	.064	.050	.054	.088	.092	.072	.077
Continuous[a]	*.065*	*.068*	*.063*	*.064*	*.085*	*.090*	*.084*	*.085*
Monthly cocaine use	.060	.062	.052	.055	.059	.069	.070	.072
Continuous[a]	*.055*	*.061*	*.053*	*.058*	*.058*	*.072*	*.075*	*.078*
Monthly amphetamine use	.070	.074	.064	.068	.061	.072	.073	.076
Continuous[a]	*.066*	*.075*	*.065*	*.072*	*.060*	*.073*	*.073*	*.078*
Interpersonal aggression	.102	.126	.119	.134	.068	.102	.070	.107
Theft	.104	.110	.075	.086	.100	.108	.057	.071
Trouble with Police	.086	.095	.042	.055	.036	.046	.039	.048
Continuous[a]	*.094*	*.097*	*.057*	*.060*	*.045*	*.055*	*.052*	*.058*
Arguing with parent	.088	.103	.044	.067	.100	.134	.010	.063
Victimization	.092	.114	.078	.108	.082	.105	.089	.110

Table 28, cont.
Summary of Linear and Non-Linear Relationships
with Hours of Part-Time Work

	Males				Females			
	Nonworkers Included		Nonworkers Excluded		Nonworkers Included		Nonworkers Excluded	
Dependent Variable	r	Eta	r	Eta	r	Eta	r	Eta
Time Use:								
7+ hours of sleep	-.183	.194	-.182	.187	-.185	.186	-.147	.148
Eating breakfast	-.118	.141	-.143	.152	-.134	.152	-.161	.164
Exercising vigorously	-.142	.159	-.130	.150	-.099	.136	-.113	.150
Days of school skipped	.116	.120	.111	.111	.102	.114	.116	.117
Evenings out	.009	.036	-.008	.035	.035	.079	-.001	.075
Evenings out on date	.144	.146	.103	.104	.132	.140	.109	.121
Subjective Experiences:								
Satisfaction with life	-.030	.054	-.047	.063	-.046	.072	-.061	.082
Satisfaction with self	-.009	.036	-.004	.037	-.048	.057	-.015	.028
Satisfaction with fun	-.040	.058	-.055	.065	-.061	.097	-.074	.109
Satisfaction with leisure	-.162	.171	-.144	.155	-.168	.178	-.147	.160
Satisfaction with job			.033	.073			.011	.034
Self-esteem	-.039	.046	-.036	.045	-.012	.051	-.039	.057

Note: Those who worked, but not for pay, are excluded from all analyses here.

[a] Refers to statistics based on a continuous scaling of the given problem behavior index; dichotomous scaling was used in the corresponding MCAs, and, thus, are presented first for each given problem behavior index.

Table 29
Summary of Bivariate and Multivariate Relationships
with Hours of Part-Time Work

	Males		Females	
Dependent Variable	Eta	Beta	Eta	Beta
Problem Behavior:				
1/2 pack or more cigarette use	.141	.091	.118	.082
Monthly alcohol use	.108	.080	.135	.099
Heavy alcohol use in past 2 weeks	.102	.066	.094	.065
Monthly marijuana use	.065	.037	.092	.068
Monthly cocaine use	.069	.050	.069	.056
Monthly amphetamine use	.074	.054	.068	.055
Interpersonal aggression	.132	.107	.096	.082
Theft	.114	.097	.107	.084
Trouble with Police	.102	.076	.047	.045
Arguing with parent	.096	.078	.123	.083
Victimization	.113	.102	.102	.092

Table 29, cont.
Summary of Bivariate and Multivariate Relationships
with Hours of Part-Time Work

	Males		Females	
Dependent Variable	Eta	Beta	Eta	Beta
Time Use:				
7+ hours of sleep	.189	.186	.181	.182
Eating breakfast	.142	.120	.141	.113
Exercising vigorously	.162	.130	.134	.127
Days of school skipped	.122	.094	.114	.093
Evenings out	.040	.040	.080	.053
Evenings out on date	.146	.132	.137	.110
Subjective Experiences:				
Satisfaction with life	.053	.043	.076	.069
Satisfaction with self	.040	.037	.052	.041
Satisfaction with fun	.055	.059	.087	.086
Satisfaction with leisure	.167	.177	.171	.181
Satisfaction with job	.081	.082	.044	.050
Self-esteem	.051	.034	.054	.050

Figure 1
Half-Pack or More per Day Cigarette Use Related to Hours of Work, with and without Controls for Background and Educational Success (data from Table 5)

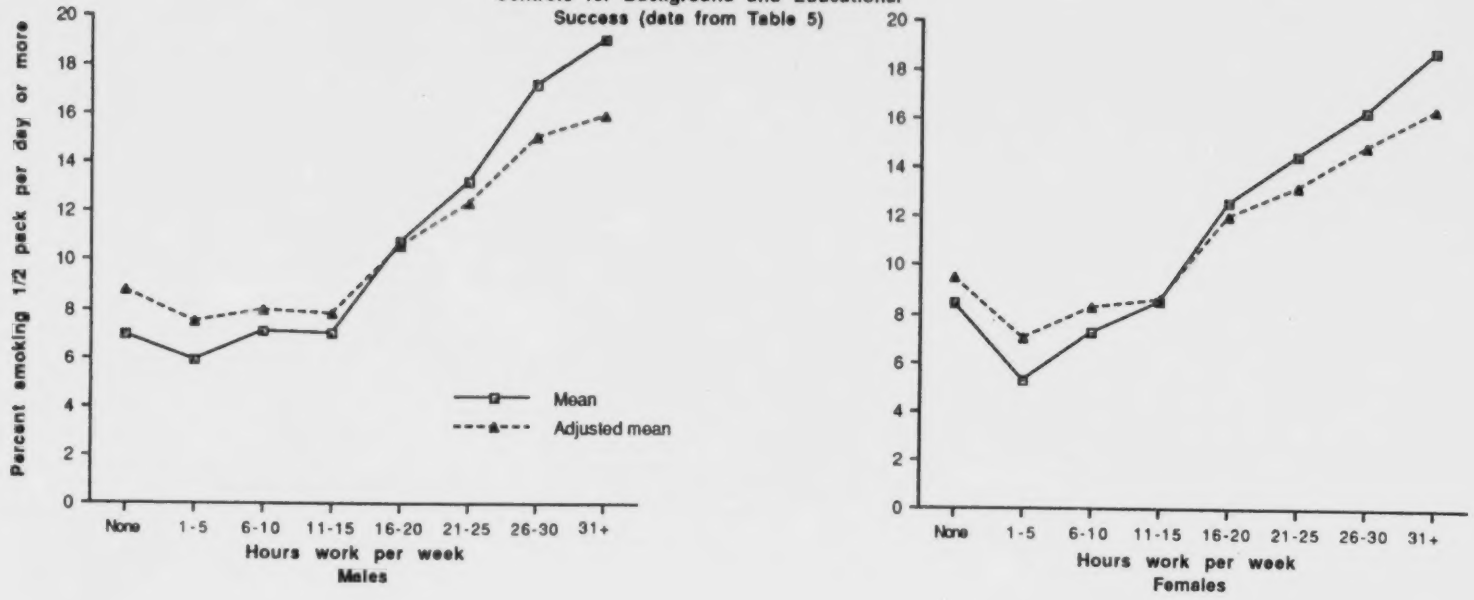

Figure 2
Monthly Alcohol Use Related to Hours of Work, with and without Controls for Background and Educational Success
(data from Table 6)

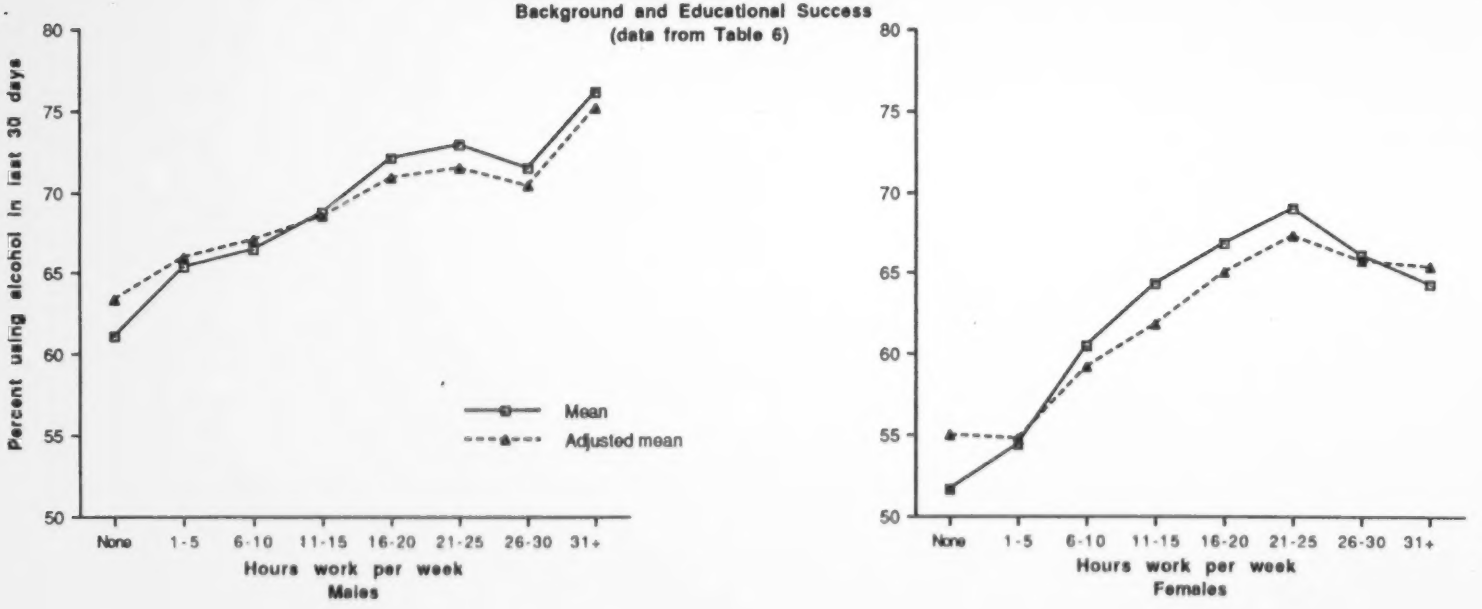

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Figure 3
Heavy Alcohol Use in Past Two Weeks Related to Hours of Work, with and without Controls for Background and Educational Success (data from Table 7)

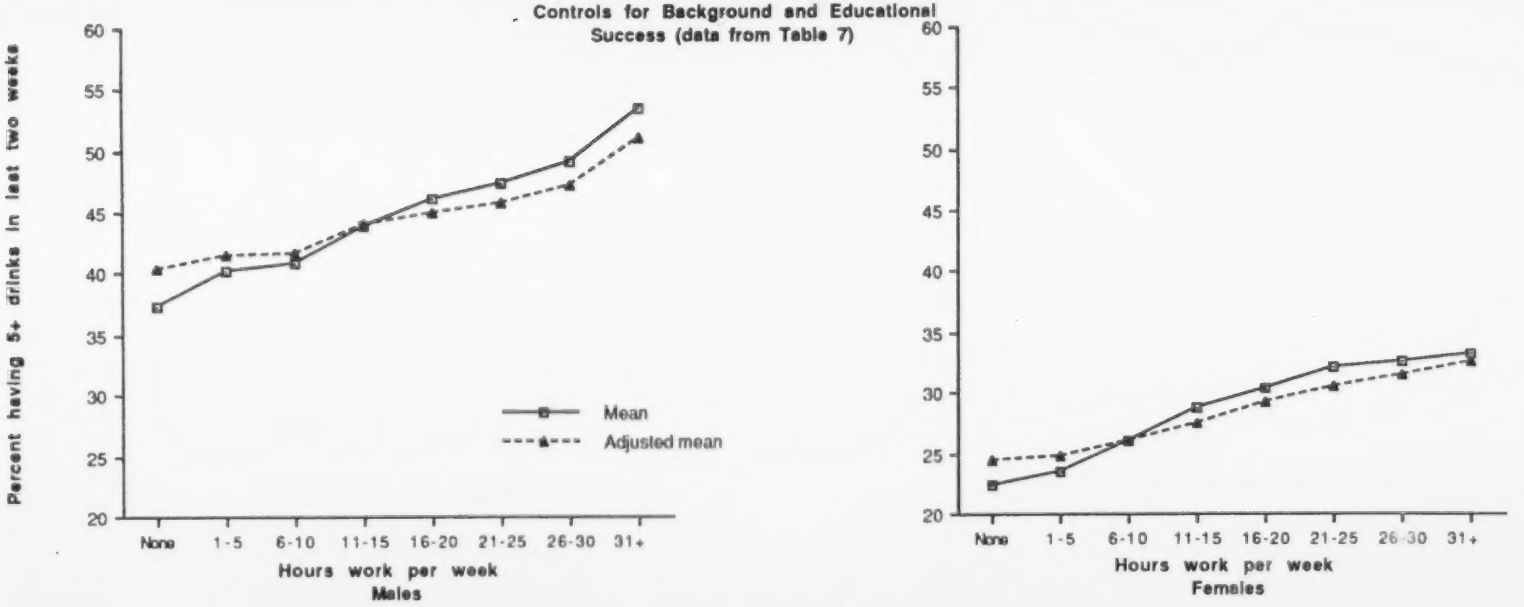

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Figure 4
Monthly Marijuana Use Related to Hours of Work, with and without Controls for Background and Educational Success (data from Table 8)

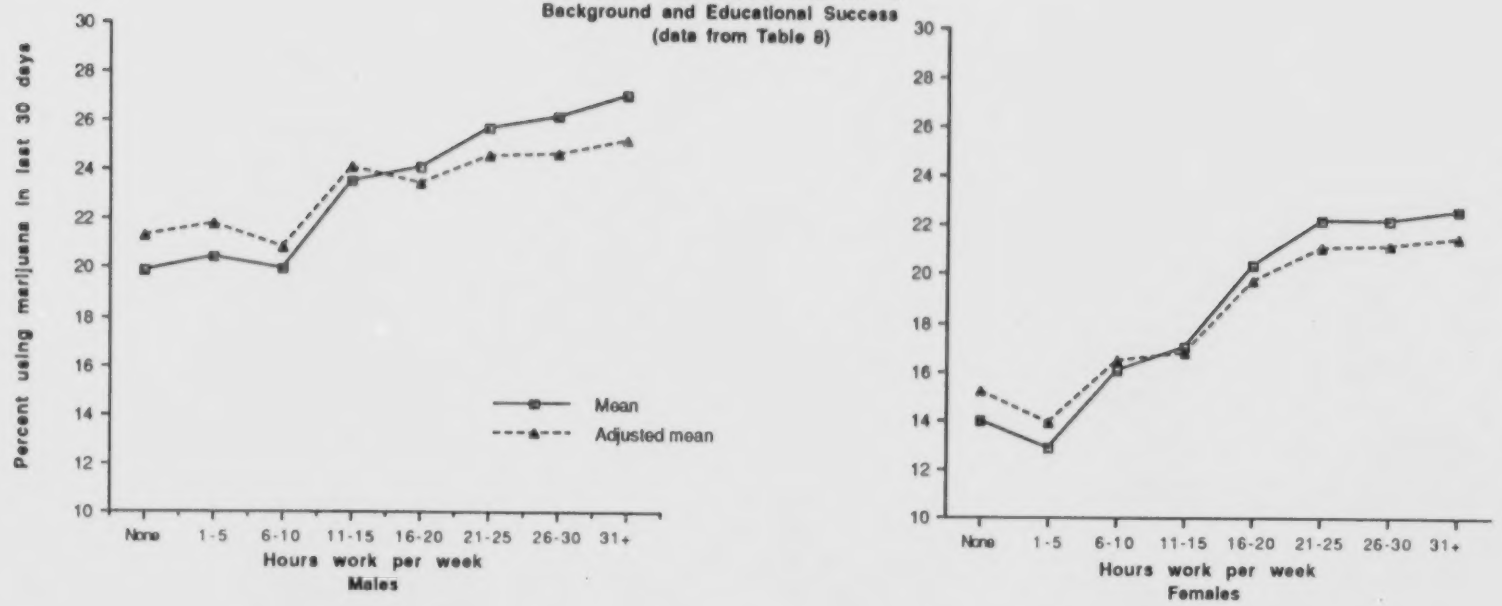

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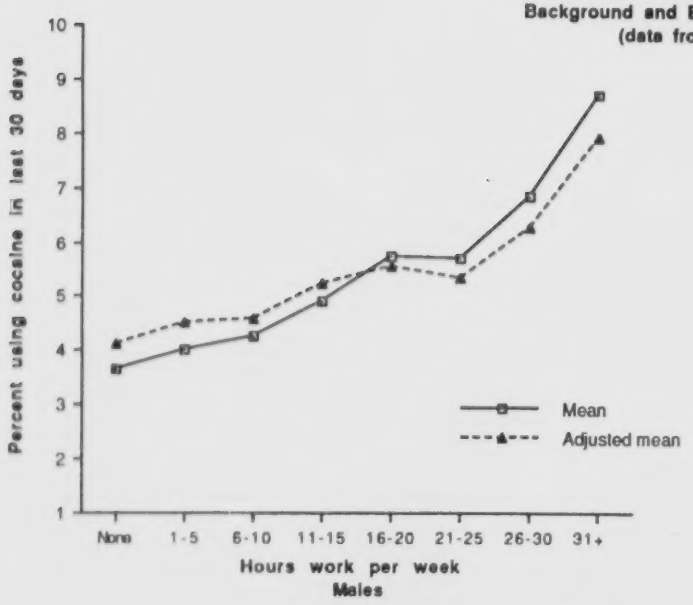
Figure 5
Monthly Cocaine Use Related to Hours of Work, with and without Controls for Background and Educational Success
(data from Table 9)



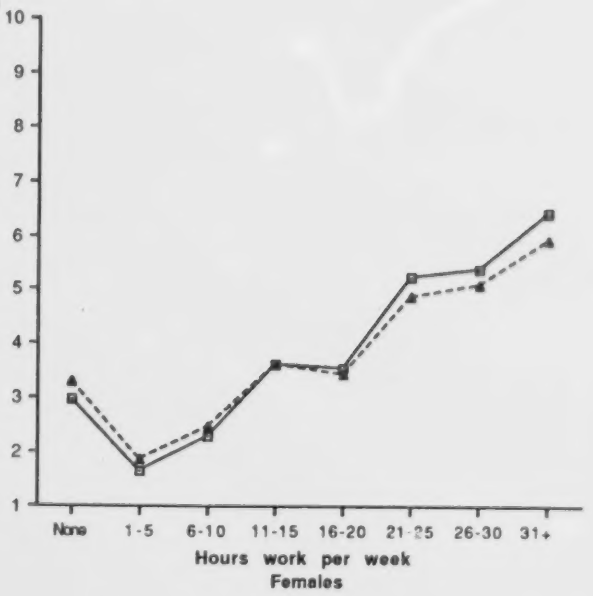


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Figure 6
Monthly Amphetamine Use Related to Hours of Work, with and without Controls for Background and Educational Success (data from Table 10)

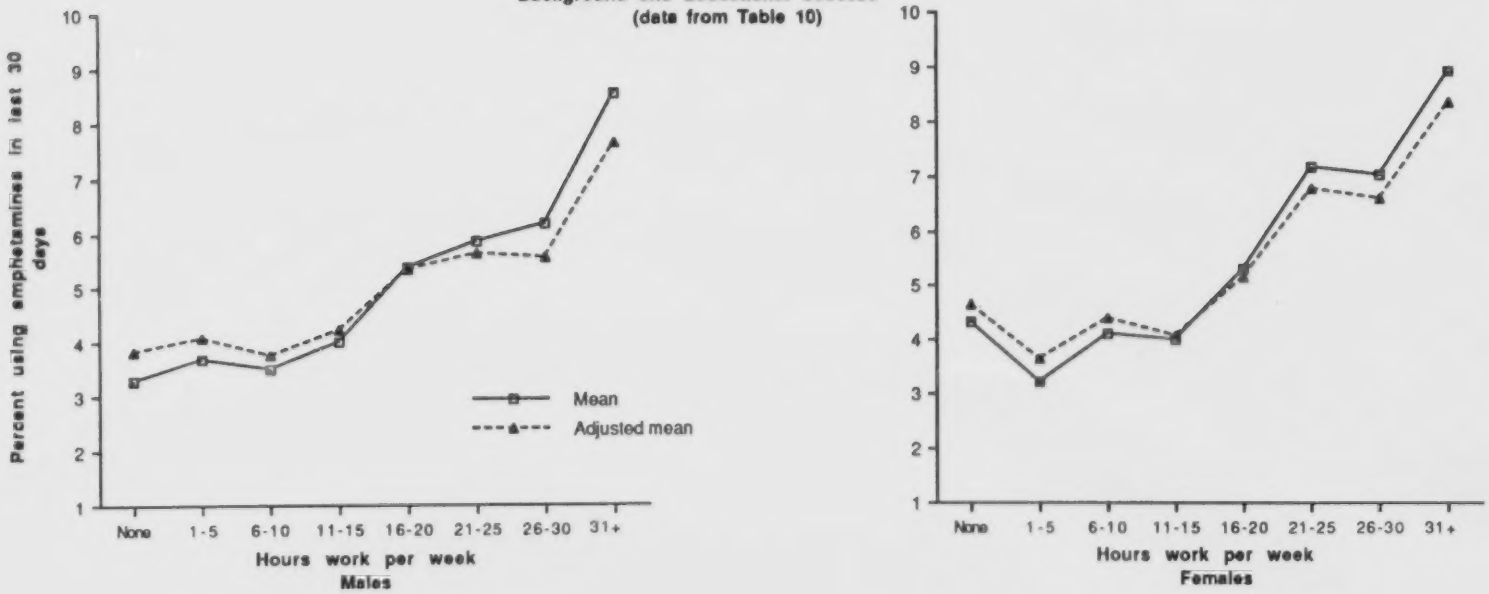

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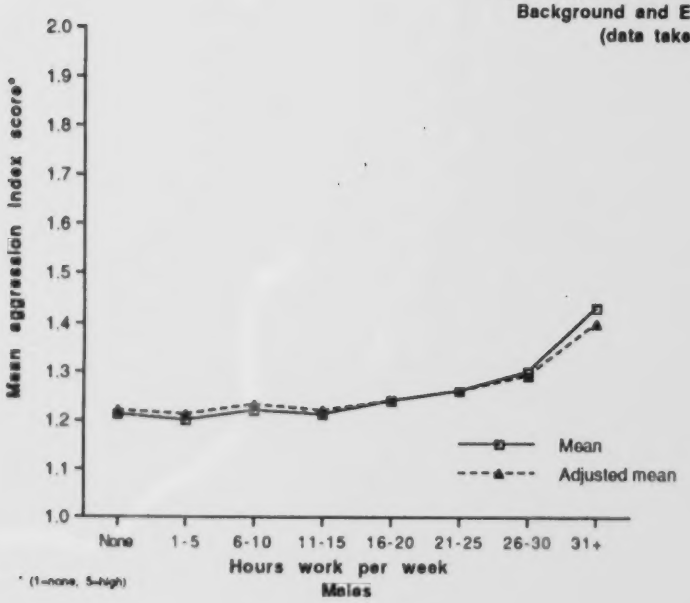
Figure 7
Interpersonal Aggression Related to Hours of Work, with and without Controls for Background and Educational Success
(data taken from Table 11)



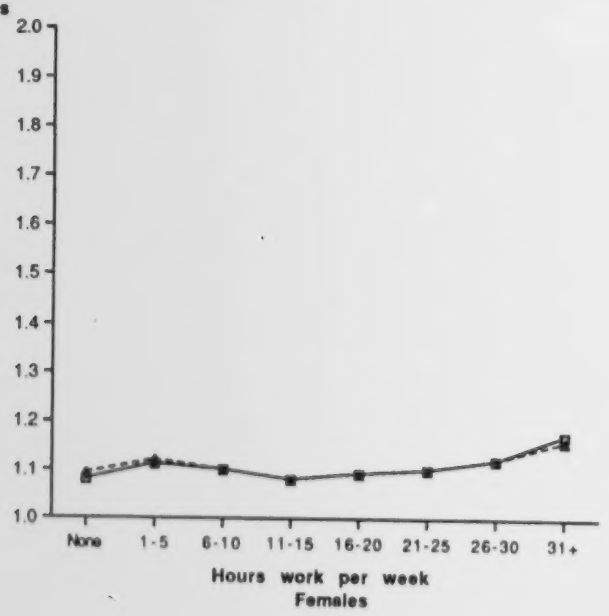


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Figure 8
Theft Related to Hours of Work, with and without Controls for Background and Educational Success (data taken from Table 12)

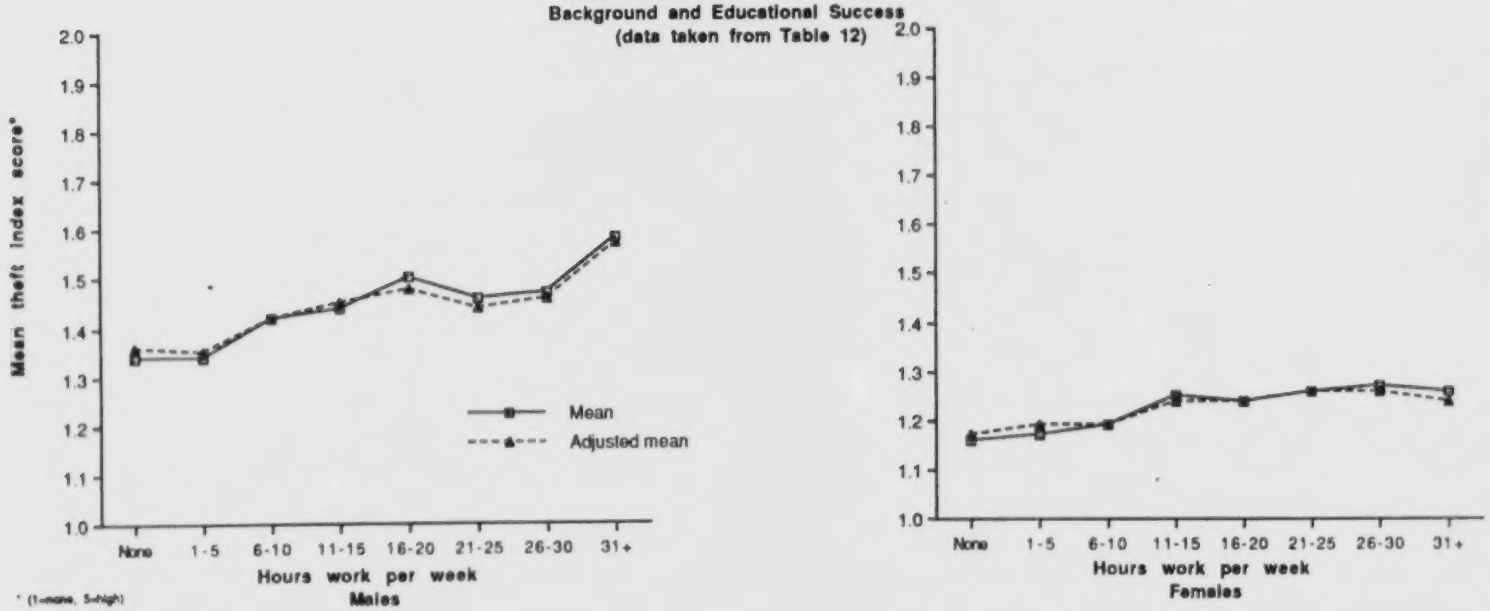

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Figure 9
Trouble with Police Related to Hours of Work, with and without Controls for Background and Educational Success
(data taken from Table 13)

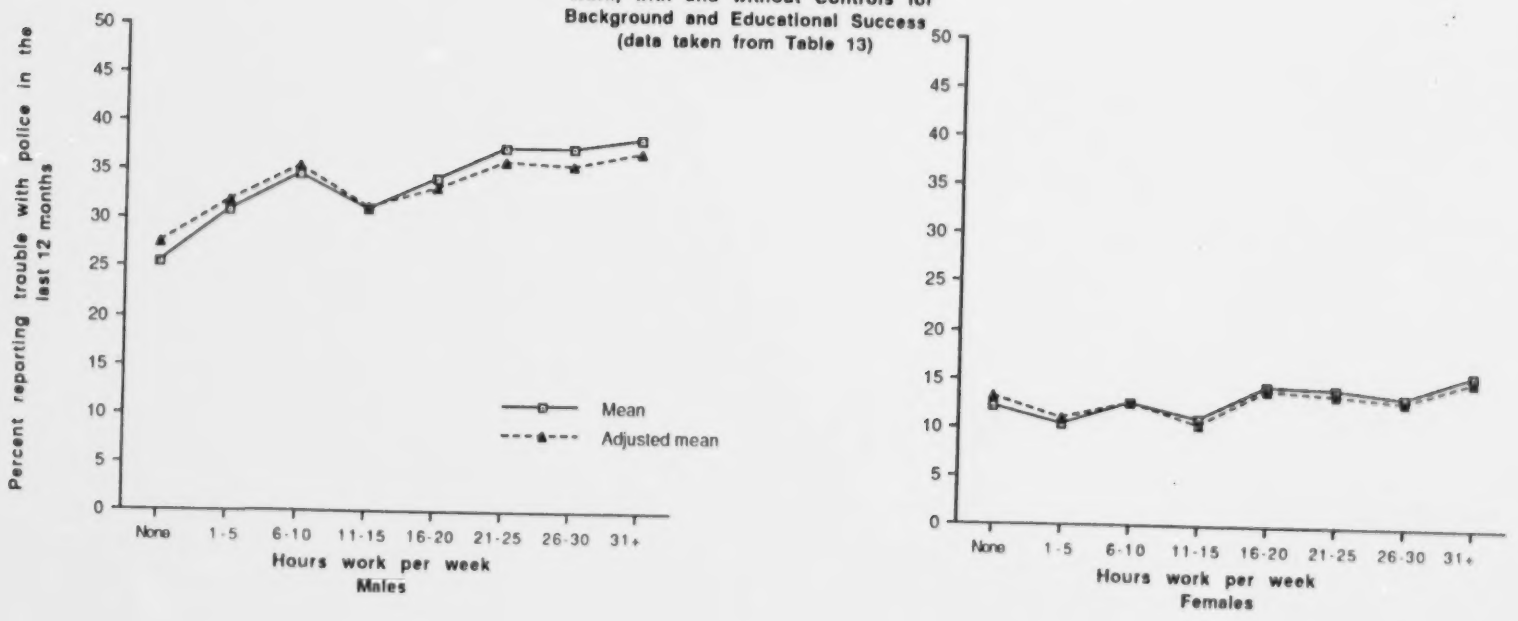

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Figure 10
Arguing or Fighting with a Parent Related to Hours of Work, with and without Controls for Background and Educational Success (data taken from Table 14)

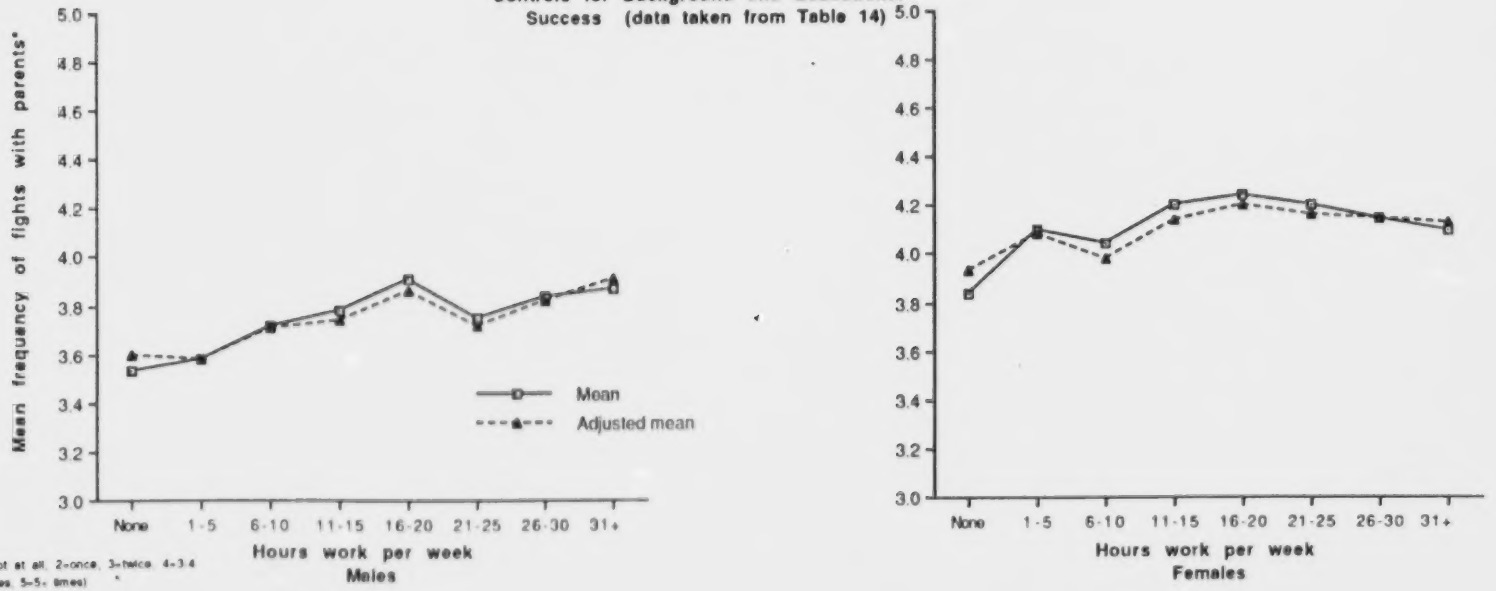

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Figure 11
Victimization Related to Hours of Work, with and without Controls for Background and Educational Success (data from Table 15)

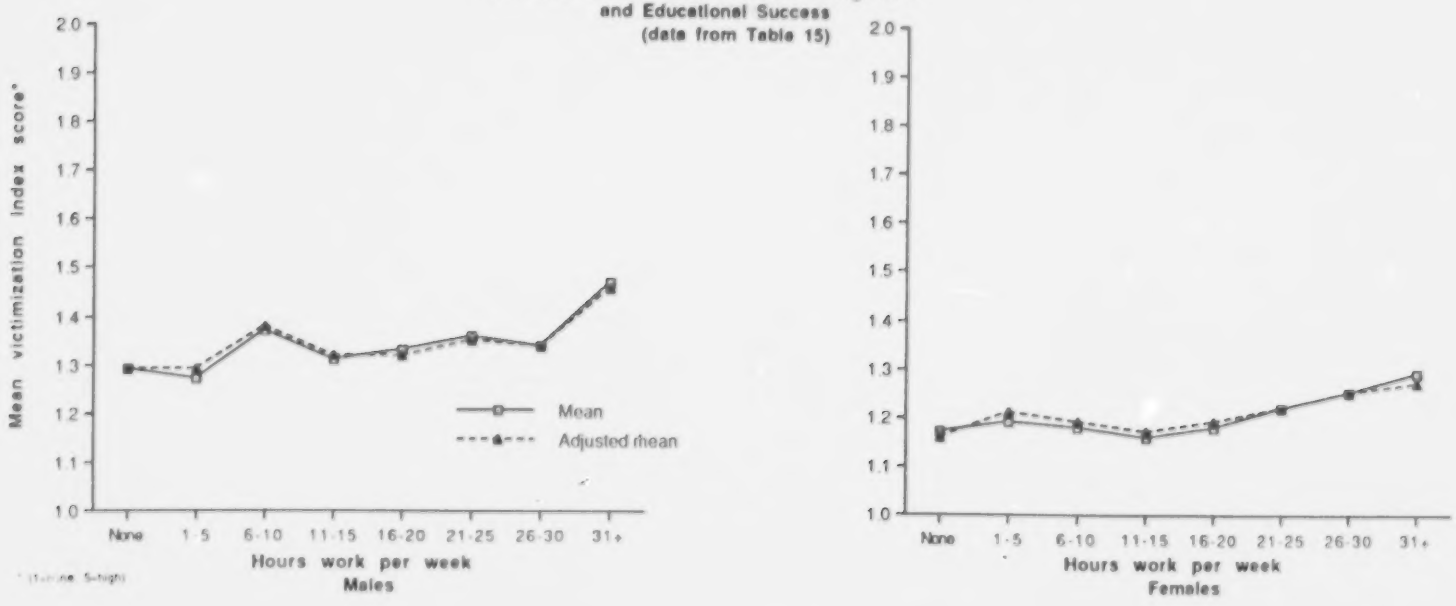

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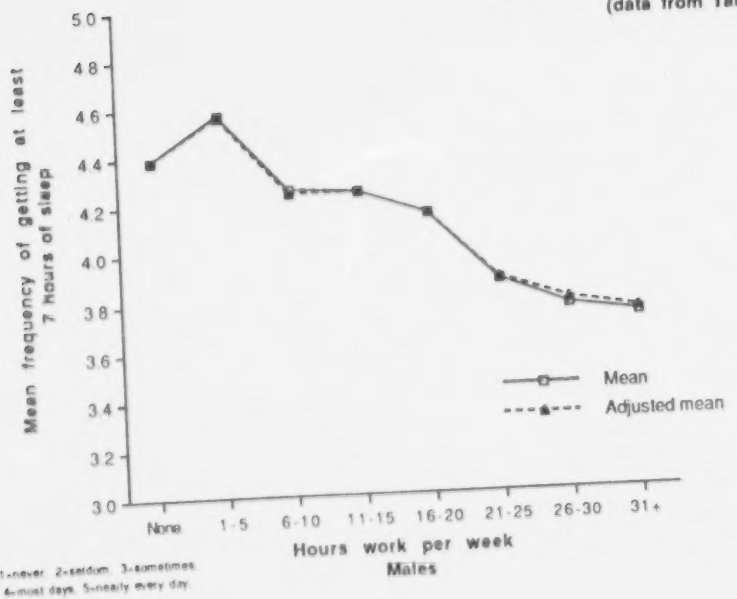
Figure 12
Seven or More Hours Sleep Related to Hours of Work, with and without Controls for Background and Educational Success
(data from Table 16)



(1=never, 2=seldom, 3=sometimes, 4=most days, 5=nearly every day, 6=every day)

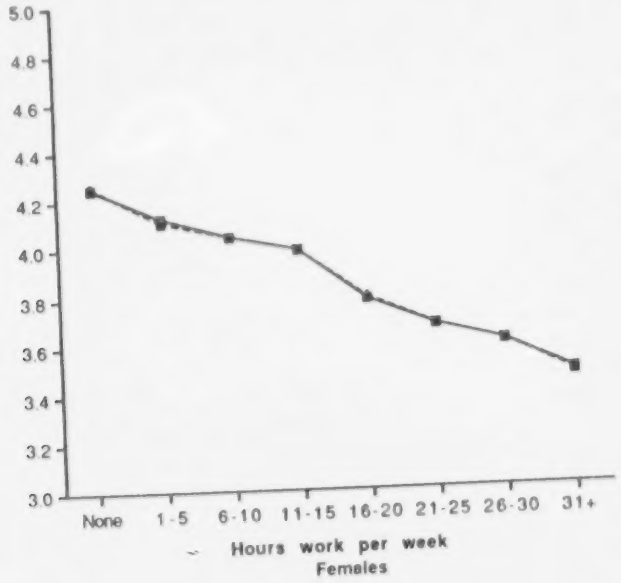


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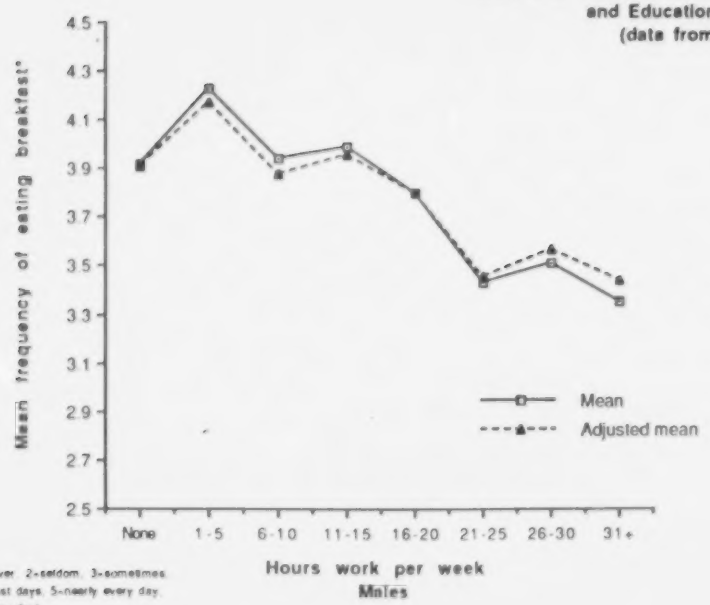
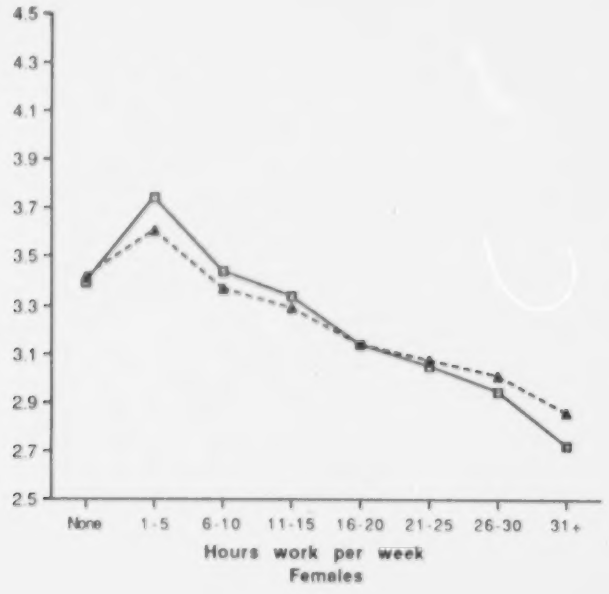
Figure 13
Eating Breakfast Related to Hours of Work, with and without Controls for Background and Educational Success
(data from Table 17)



Males



Females

* (1=never, 2=seldom, 3=sometimes, 4=most days, 5=nearly every day, 6=every day)

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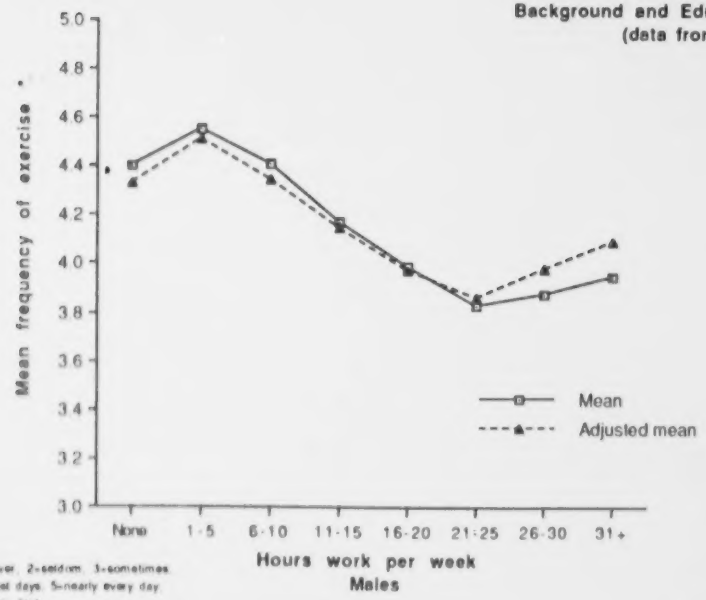
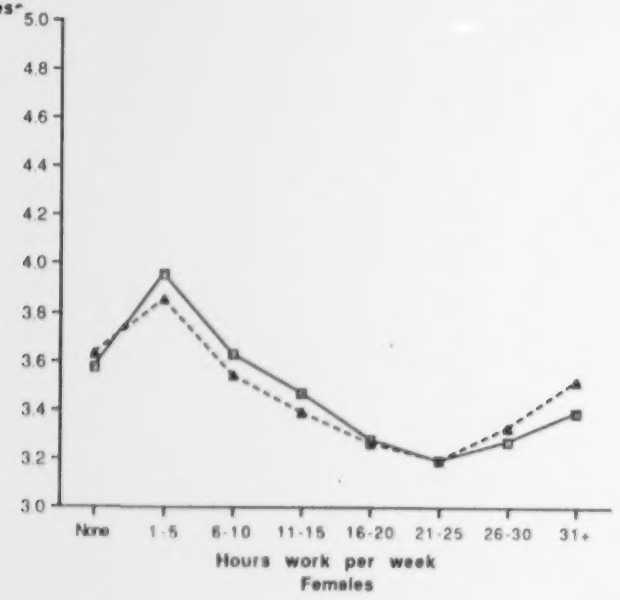
Figure 14
Exercising Vigorously Related to Hours of Work, with and without Controls for Background and Educational Success
(data from Table 18)





* (1=never, 2=seldom, 3=sometimes, 4=most days, 5=nearly every day, 6=every day)

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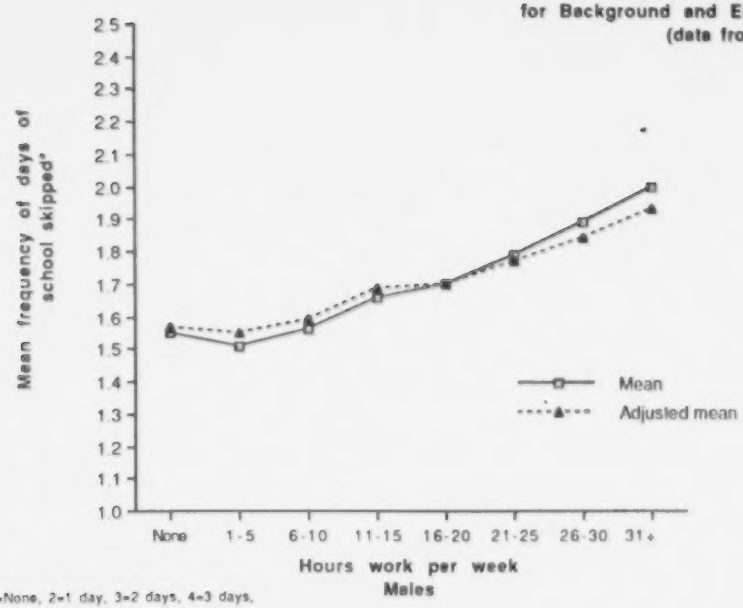
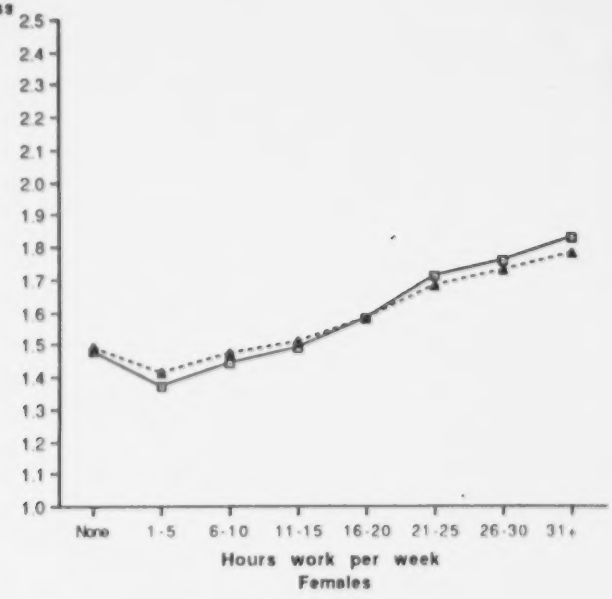
Figure 15
Days of School skipped or "cut" Related to Hours of Work, with and without Controls for Background and Educational Success (data from Table 19)





*(1=None, 2=1 day, 3=2 days, 4=3 days, 5=4-5 days, 6=6-10 days, 7=11+ days)

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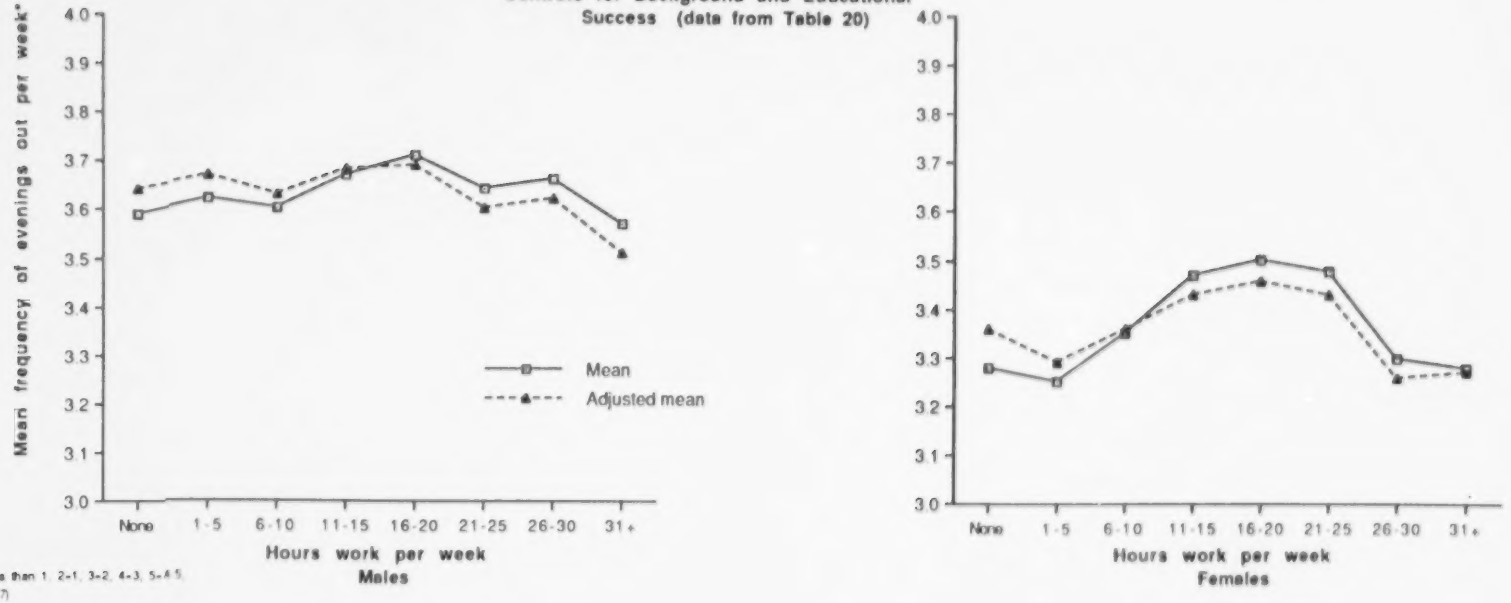
Figure 16
Evenings Out for Fun and Recreation
Related to Hours of Work, with and without
Controls for Background and Educational
Success (data from Table 20)



* (1=Less than 1, 2=1, 3=2, 4=3, 5=4-5, 6=6-7)

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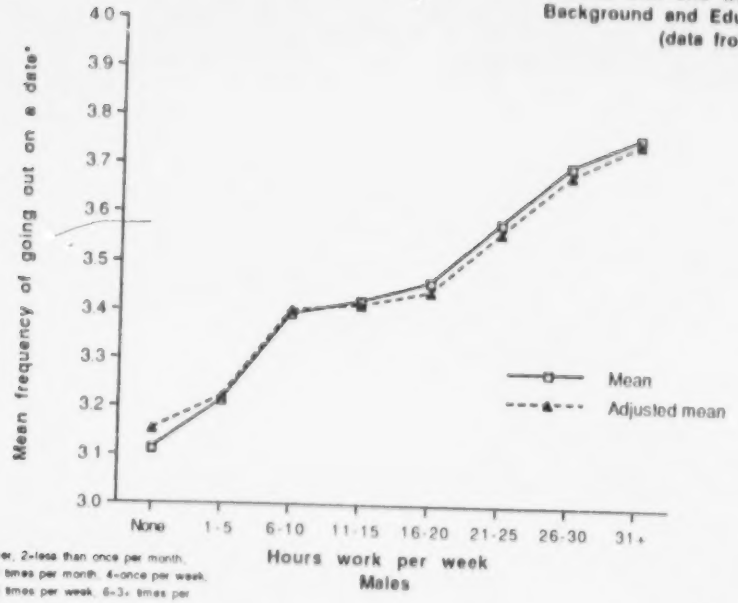
Figure 17
Evenings Out on a Date Related to Hours of Work, with and without Controls for Background and Educational Success
(data from Table 21)



* (1=Never, 2=less than once per month, 3=2-3 times per month, 4=once per week, 5=2-3 times per week, 6=3+ times per week)

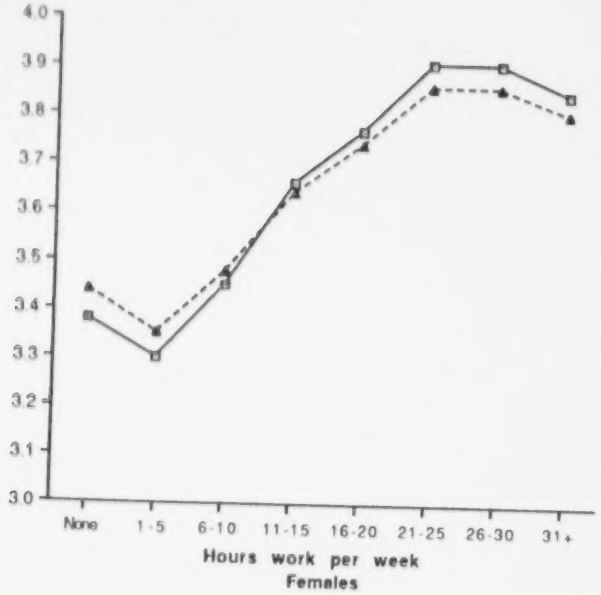


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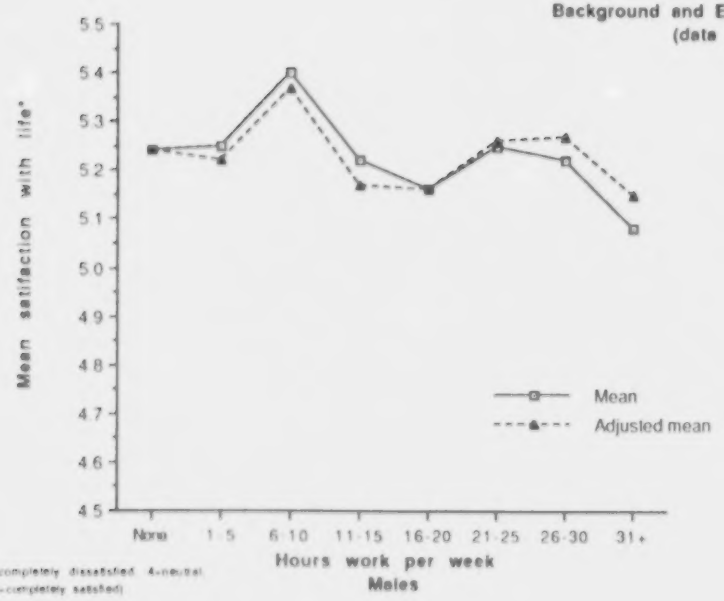
Figure 18
Satisfaction with Life Related to Hours of Work, with and without Controls for Background and Educational Success*
(data from Table 22)



*(1=completely dissatisfied, 4=neutral, 7=completely satisfied)

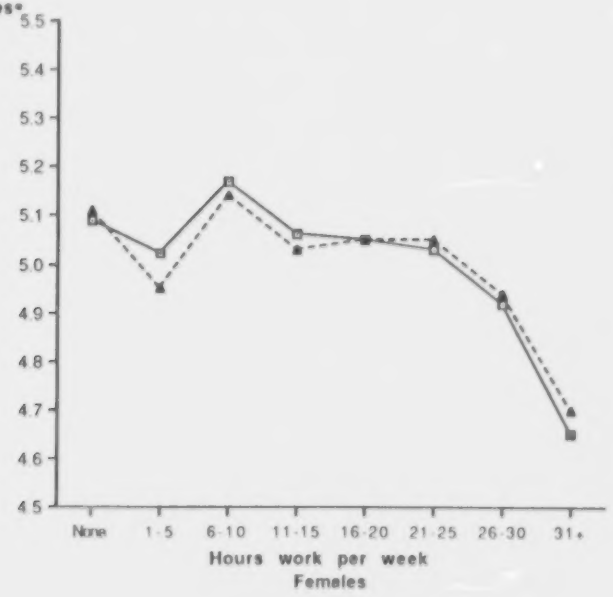


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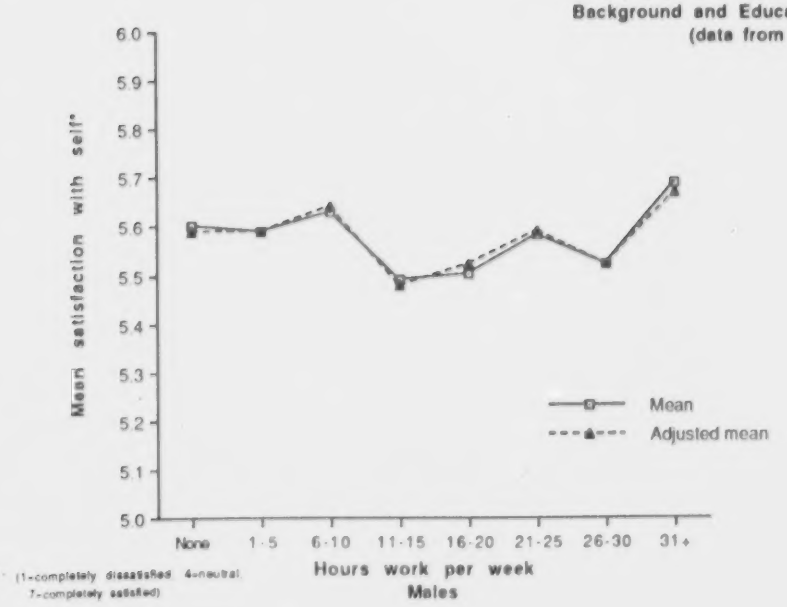
Figure 19
Satisfaction with Self Related to Hours of Work, with and without Controls for Background and Educational Success (data from Table 23)



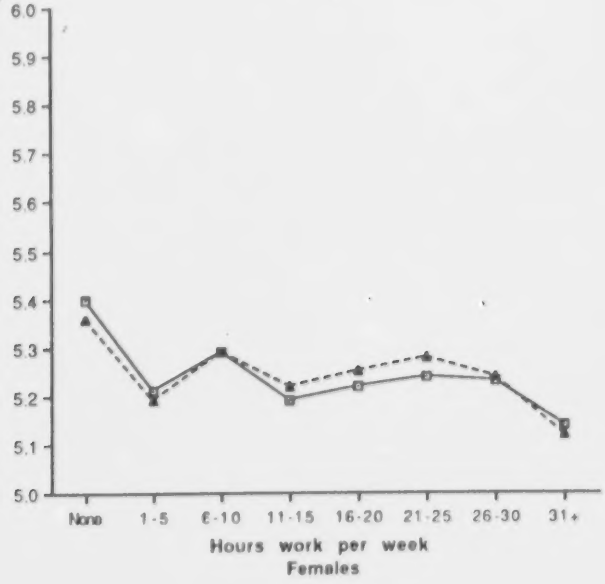


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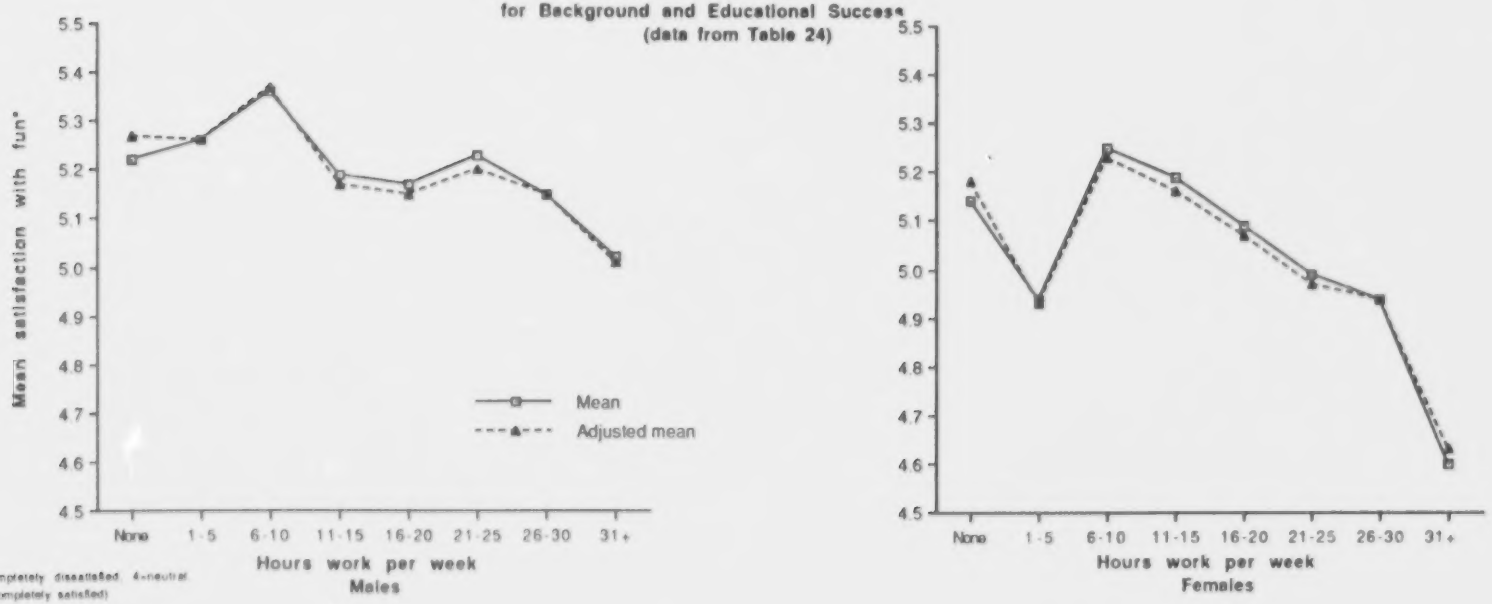
Figure 20
Satisfaction with Amount of Fun Related to Hours of Work, with and without Controls for Background and Educational Success
(data from Table 24)



* (1=completely dissatisfied, 4=neutral, 7=completely satisfied)

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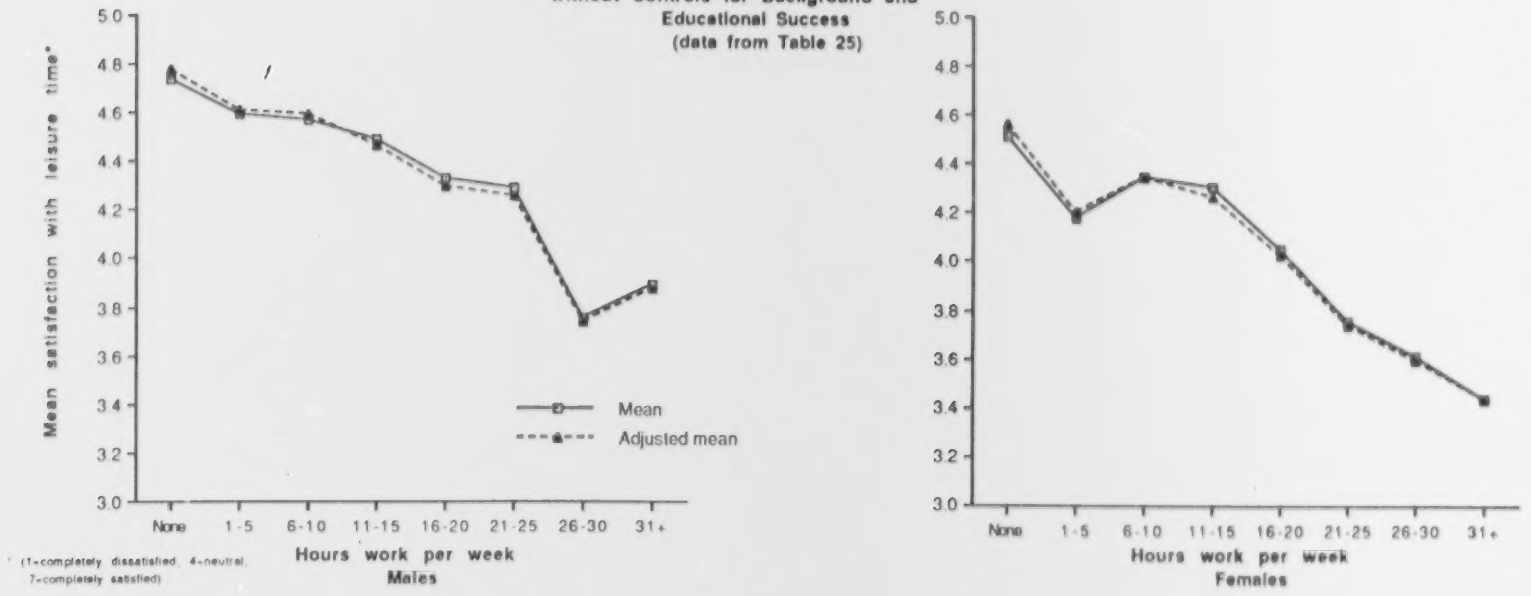
Figure 21
Satisfaction with the Way Leisure Time is Spent Related to Hours of Work, with and without Controls for Background and Educational Success
(data from Table 25)



* (1=completely dissatisfied, 4=neutral, 7=completely satisfied)

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Figure 22
Satisfaction with Job Related to Hours of Work, with and without Controls for Background and Educational Success
(data from Table 26)

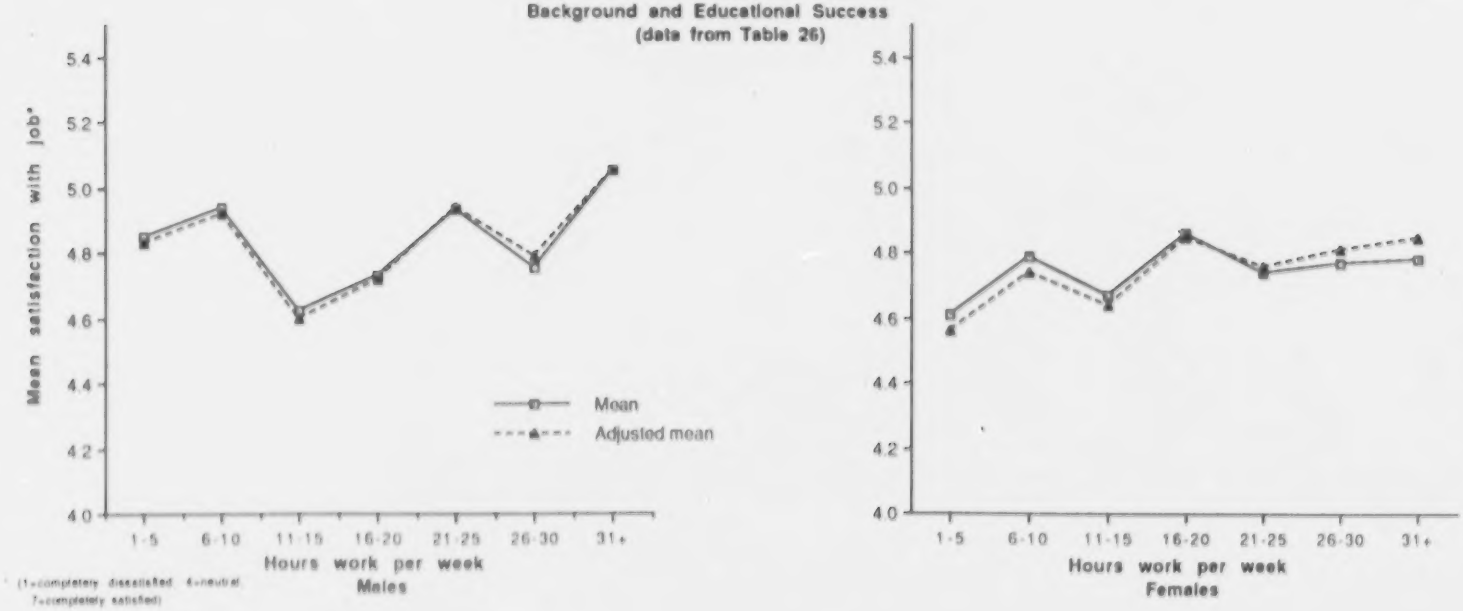

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Figure 23
Self-Esteem Related to Hours Work per Week, with and without Controls for Background and Educational Success
(data from Table 27)

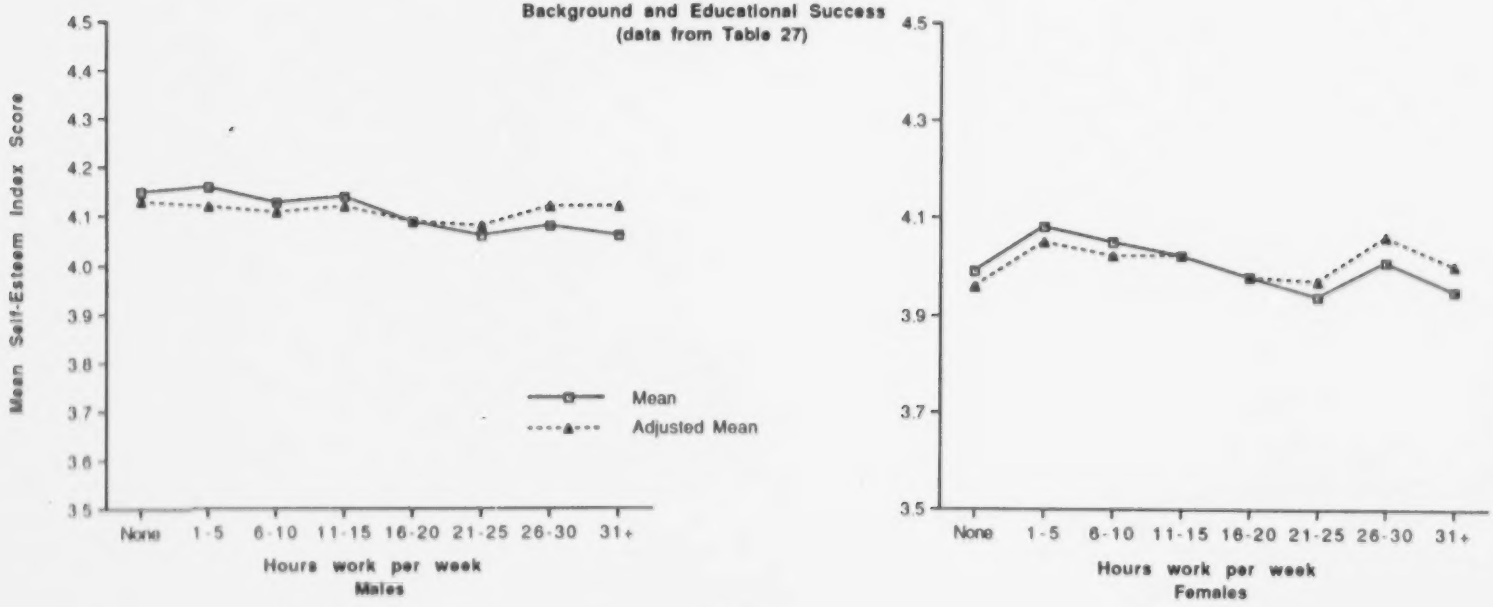

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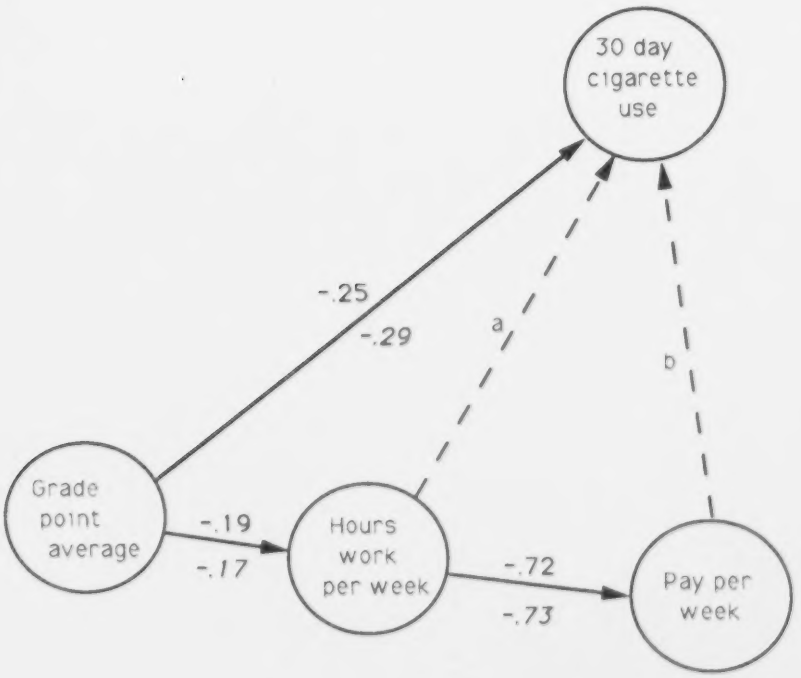
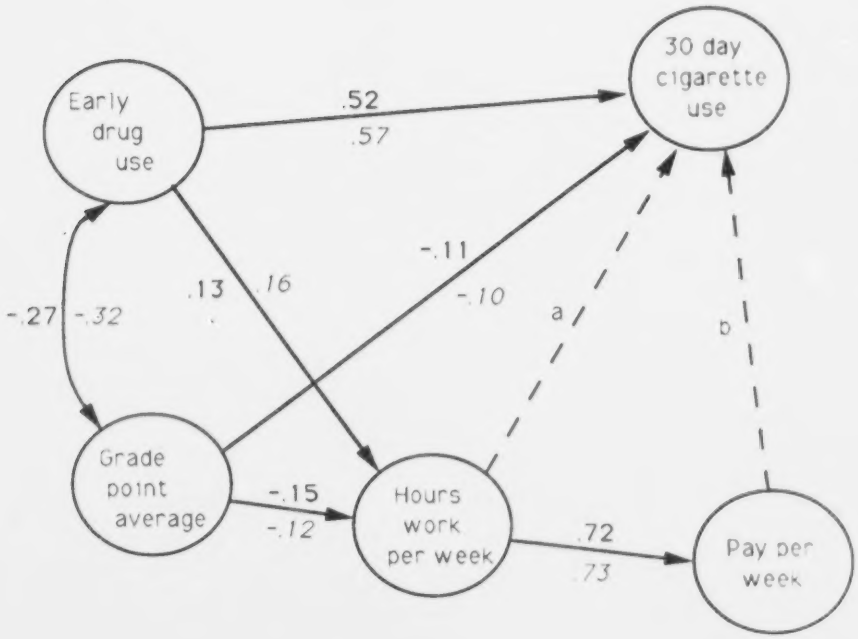
Figure 24
Predicting 30 day cigarette use
(Pattern A)



	MALES			FEMALES		
	Paths		% of variance	Paths		% of variance
Model	A	B	explained	A	B	explained
1)	-	-	8.1%	-	-	10.0%
2)	.15	-	10.1%	.14	-	11.0%
3)	-	.10	8.9%	-	.14	12.0%
4)	.19	-.05	10.3%	.06	.10	12.0%

Note: Italicized values below and/or to the right refer to females

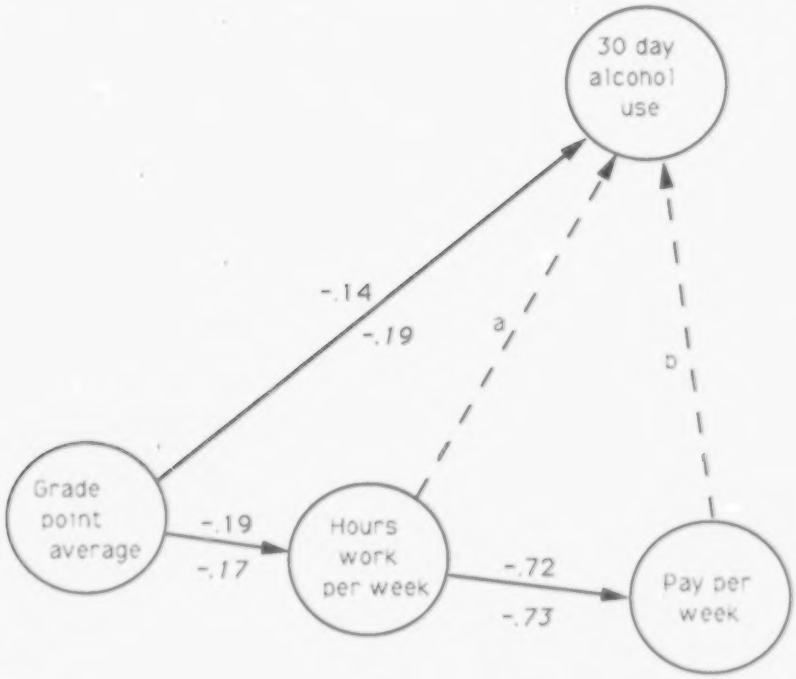
Figure 25
Predicting 30 day cigarette use
(Pattern B)



	MALES			FEMALES		
	Paths		% of variance	Paths		% of variance
Model	A	B	explained	A	B	explained
1)	-	-	32.1%	-	-	37.6%
2)	.06	-	32.4%	.04	-	37.7%
3)	-	.02	32.1%	-	.05	37.5%
4)	.11	-.06	32.6%	.11	.04	37.6%

Note Italicized values below and/or to the right refer to females

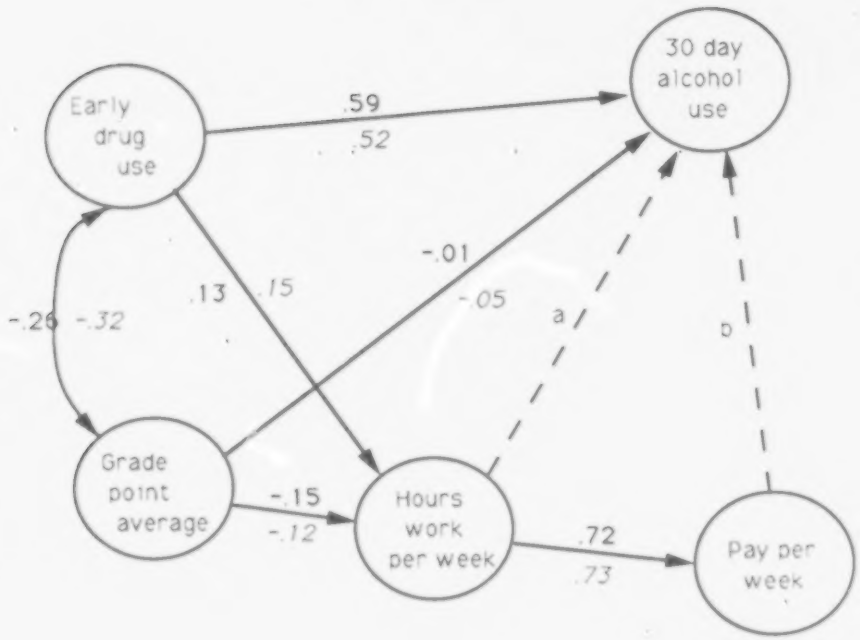
Figure 26
Predicting 30 day alcohol use
(Pattern A)



	MALES			FEMALES		
	Paths		% of variance	Paths		% of variance
Model	A	B	explained	A	B	explained
1)	-	-	2.7%	-	-	4.3%
2)	.13	-	4.2%	.08	-	4.8%
3)	-	.11	3.8%	-	.12	5.7%
4)	.11	.03	4.2%	-.04	.16	5.8%

Note: Italicized values below and/or to the right refer to females

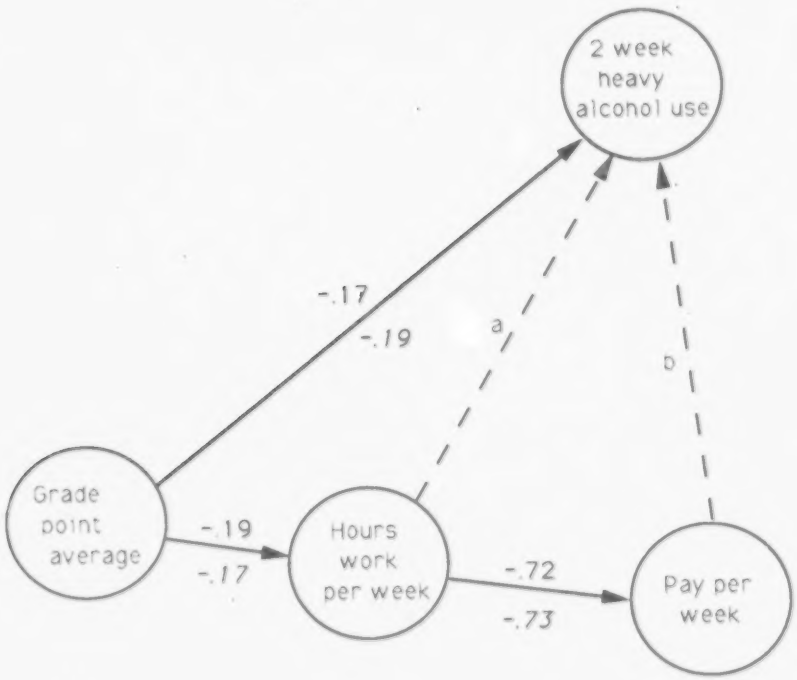
Figure 27
Predicting 30 day alcohol use
(Pattern B)



	MALES			FEMALES		
	Paths		% of variance	Paths		% of variance
Model	A	B	explained	A	B	explained
1)	-	-	35.5%	-	-	28.3%
2)	.05	-	27.1%	.01	-	28.3%
3)	-	.05	35.5%	-	.04	28.2%
4)	.05	.01	35.5%	-.05	.08	28.3%

Note: Italicized values below and/or to the right refer to females

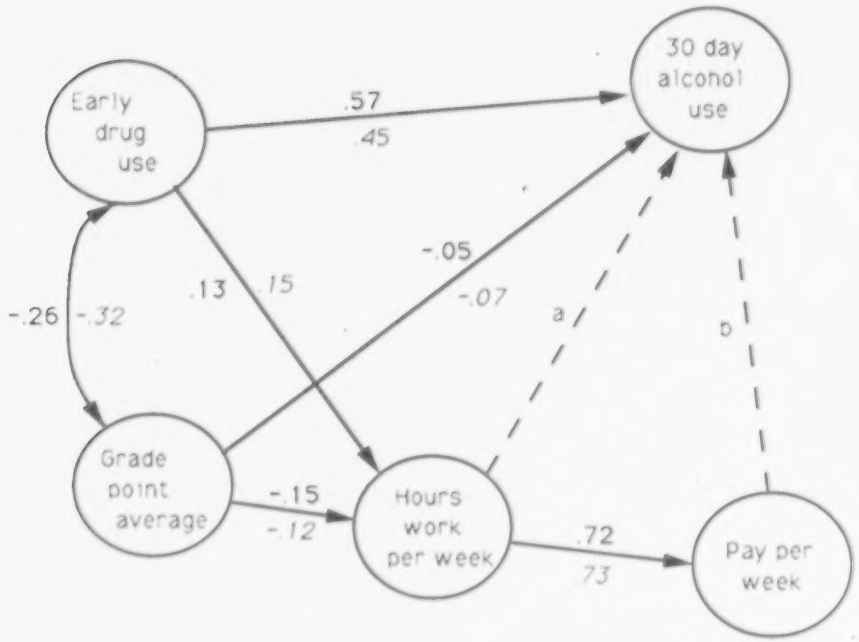
Figure 28
Predicting 2 week heavy alcohol use
(Pattern A)



	MALES			FEMALES		
	Paths		% of variance	Paths		% of variance
Model	A	B	explained	A	B	explained
1)	-	-	2.8%	-	-	4.3%
2)	.14	-	5.5%	.08	-	4.8%
3)	-	.10	4.7%	-	.12	5.4%
4)	.15	-.01	5.5%	-.001	.10	5.2%

Note: Italicized values below and/or to the right refer to females

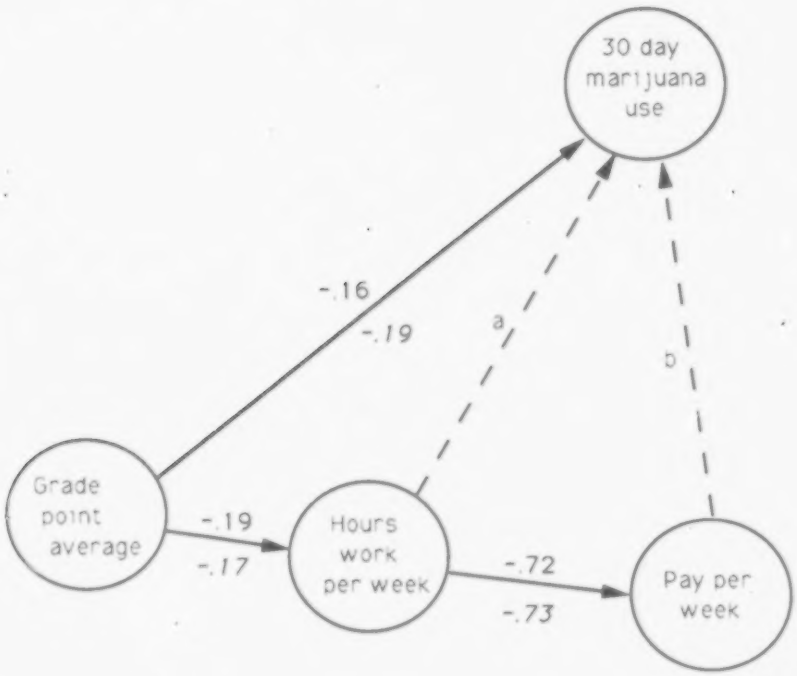
Figure 29
Predicting 2 week heavy alcohol use
(Pattern B)



	MALES			FEMALES		
	Paths		% of variance	Paths		% of variance
Model	A	B	explained	A	B	explained
1)	-	-	33.6%	-	-	22.5%
2)	.07	-	33.8%	.02	-	22.5%
3)	-	.04	33.6%	-	.02	22.4%
4)	.09	-.03	33.9%	-.01	.03	22.4%

Note: Italicized values below and/or to the right refer to females

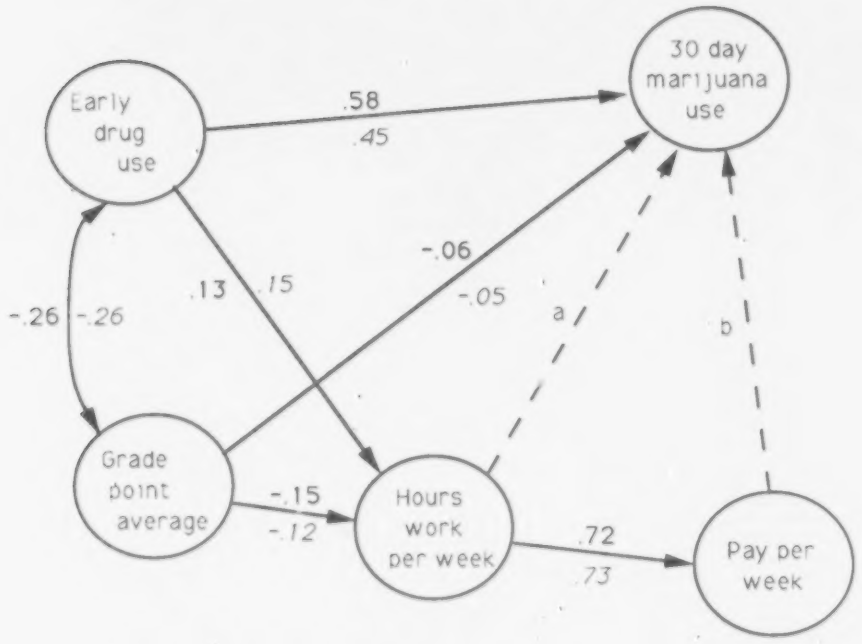
Figure 30
Predicting 30 day marijuana use
(Pattern A)



	MALES			FEMALES		
	Paths		% of variance	Paths		% of variance
Model	A	B	explained	A	B	explained
1)	-	-	3.3%	-	-	3.8%
2)	.09	-	4.1%	.07	-	4.3%
3)	-	.09	4.0%	-	.08	4.4%
4)	.06	.04	4.1%	.02	.06	4.4%

Note: Italicized values below and/or to the right refer to females

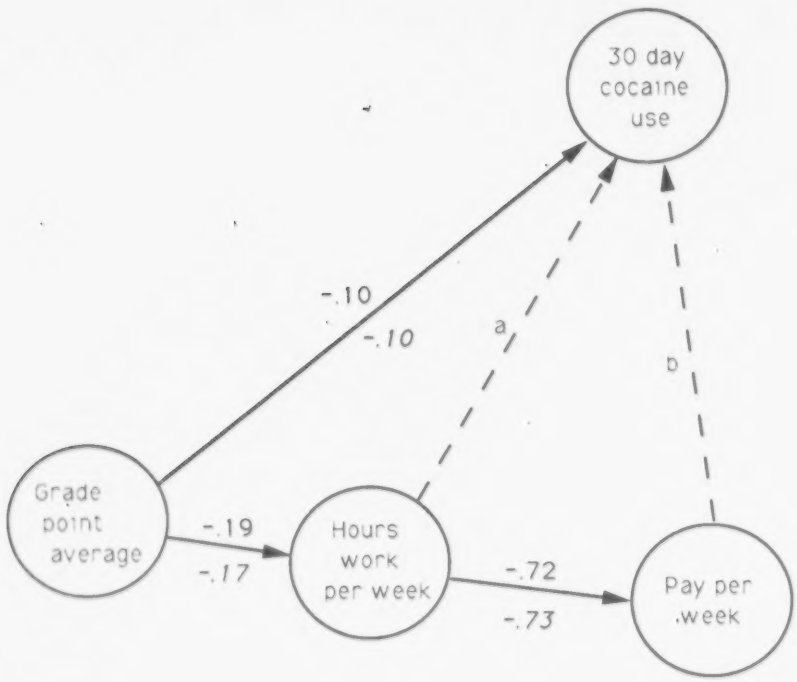
Figure 31
Predicting 30 day marijuana use
(Pattern B)



	MALES			FEMALES		
	Paths		% of variance	Paths		% of variance
Model	A	B	explained	A	B	explained
1)	-	-	35.1%	-	-	22.2%
2)	.04	-	34.9%	.01	-	22.1%
3)	-	.04	35.0%	-	.01	22.1%
4)	.02	.03	34.9%	.01	-.002	22.1%

Note: Italicized values below and/or to the right refer to females

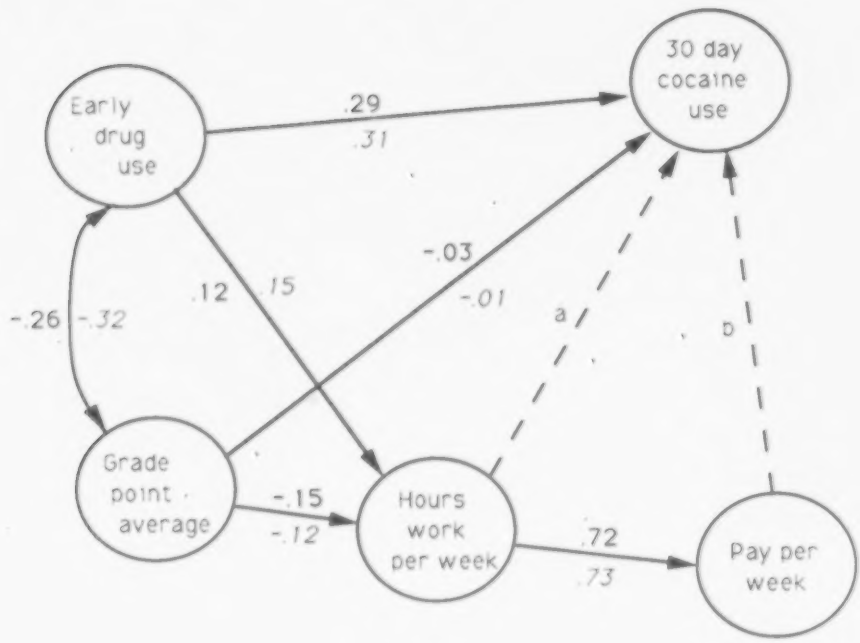
Figure 32
Predicting 30 day cocaine use
(Pattern A)



	MALES			FEMALES		
	Paths		% of variance	Paths		% of variance
Model	A	B	explained	A	B	explained
1)	-	-	1.2%	-	-	1.3%
2)	.07	-	1.7%	.07	-	1.8%
3)	-	.07	1.7%	-	.09	2.0%
4)	.03	.05	1.7%	.01	.08	2.0%

Note: Italicized values below and/or to the right refer to females.

Figure 33
Predicting 30 day cocaine use
(Pattern B)



	MALES			FEMALES		
	Paths		% of variance	Paths		% of variance
Model	A	B	explained	A	B	explained
1)	-	-	9.0%	-	-	9.6%
2)	.04	-	9.1%	.03	-	9.6%
3)	-	.04	9.1%	-	.04	9.6%
4)	.00	.04	9.1%	.00	.04	9.6%

Note: Italicized values below and/or to the right refer to females

Appendix A
Description of Measures

Construct	Response Scale	Coding
Race	1=American Indian 2=Black or Afro-American 3=Mexican American or Chicano 4=Puerto Rican or other Latin American 5=Oriental or Asian American 6=White or Caucasian 7=Other	1=Black 2=White 3=Hispanic (codes 3,4) 4=Other (codes 1, 5, 7)
Parent Education	10=Both parents have ≤ grade school ⋮ 60=Both parents have graduate or professional school after college	For Tables 1-3: 1=Low (codes 10-20) 2=Medium (codes 25-40) 3=High (codes 55-60) For Tables 4-29: 1=Low (10-20) 2 (25-30) 3 (35-40) 4 (45-50) 5=High (55-60)
Urbanicity	1=Farm 2=Country 3=Non-SMSA(small town or city) 4=Non self-representing SMSA 5=Self-representing SMSA (large urban area)	Original variable is used.
College Plans	1=Definitely won't graduate 2=Probably won't graduate 3=Probably will graduate 4=Definitely will graduate	For Tables 1-3: 0=No (codes 1-2) 1=Yes (codes 3-4) For Tables 4-29: The original variable is used.
High School Curriculum	1=Academic or college preparatory 2=General 3=Vocational, technical, or commercial 4=Other, don't know	1=College prep (code 1) 2=General (codes 2,4) 3=Vo/tech (code 3)

Construct	Response Scale	Coding
Work status/Intensity (hours work per week)	1=Don't work for pay 2=≤ 5 hours 3=6-10 hours 4=11-15 hours 5=16-20 hours 6=21-25 hours 7=26-30 hours 8=More than 30 hours 9=Work, but not for pay	Original variable is used.
Pay per week	1=No pay 2=$1.00-$5.00 3=$6.00-$10.00 4=$11.00-$20.00 5=$21.00-$35.00 6=$36.00-$50.00 7=$51.00-$75.00 8=$76.00-$125.00 9=$126.00 or more	Original variable is used.
Monthly Cigarette Use	1=Not at all 2=Less than 1 per day 3=1-5 per day 4=1/2 pack per day 5=1 pack per day 6=1 1/2 packs per day 7=2 packs per day	Daily Cigarette Use: 0=No (codes 1-2) 1=Yes (codes 3-7) 1/2 Pack per day or more: 0=No (codes 1-3) 1=Yes (codes 4-7)
Monthly Alcohol Use	1=0 times 2=1-2 times 3=3-5 times 4=6-9 times 5=10-19 times 6=20-39 times 7=40 or more times	Dichotomous: 0=No use (code 1) 1=Any use (codes 2-7)
Heavy Alcohol Use in Past Two Weeks	1=0 times 2=Once 3=Twice 4=3-5 times 5=6-9 times 6=10 or more times	Dichotomous: 0=No use (code 1) 1=Any use (codes 2-6)

Construct	Response Scale	Coding
Monthly Marijuana Use	1=0 times 2=1-2 times 3=3-5 times 4=6-9 times 5=10-19 times 6=20-39 times 7=40 or more times	Dichotomous: 0=No use (code 1) 1=Any use (codes 2-7)
Monthly Cocaine Use	1=0 times 2=1-2 times 3=3-5 times 4=6-9 times 5=10-19 times 6=20-39 times 7=40 or more times	Dichotomous: 0=No use (code 1) 1=Any use (codes 2-7)
Monthly Amphetamine Use	1=0 times 2=1-2 times 3=3-5 times 4=6-9 times 5=10-19 times 6=20-39 times 7=40 or more times	Dichotomous: 0=No use (code 1) 1=Any use (codes 2-7)
How often do you get at least seven hours of sleep?	1=Never 2=Seldom 3=Sometimes 4=Most days 5=Nearly every day 6=Every day	Original variable is used.
How often do you eat breakfast?	1=Never 2=Seldom 3=Sometimes 4=Most days 5=Nearly every day 6=Every day	Original variable is used.
How often do you exercise vigorously?	1=Never 2=Seldom 3=Sometimes 4=Most days 5=Nearly every day 6=Every day	Original variable is used.

Construct	Response Scale	Coding
During the last 4 weeks,how many days of school have you missed because you skipped or "cut"?	1=None 2=1 day 3=3 days 4=4-5 days 5=6-10 days 6=11 or more days	Original variable is used.
During a typical week, on how many evenings do you go out for fun and recreation?	1=Less than one 2=One 3=Two 4=Three 5=Four or five 6=Six or seven	Original variable is used.
On the average, how often do you go out with a date?	1=Never 2=Once a month or less 3=2-3 times per month 4=Once a week 5=2-3 times per week 6=Over 3 times per week	Original variable is used.
How satisfied are you with your life as a whole?	1=Completely dissatisfied 2 3 4=Neutral 5 6 7=Completely satisfied	Original variable is used.
How satisfied are you with yourself?	1=Completely dissatisfied 2 3 4=Neutral 5 6 7=Completely satisfied	Original variable is used.
How satisfied are you with the amount of fun you are having?	1=Completely dissatisfied 2 3 4=Neutral 5 6 7=Completely satisfied	Original variable is used.

Construct	Response Scale	Coding
How satisfied are you with the way you spend your leisure time?	1=Completely dissatisfied 2 3 4=Neutral 5 6 7=Completely satisfied	Original variable is used.
How satisfied are you with your job?	1=Completely dissatisfied 2 3 4=Neutral 5 6 7=Completely satisfied	Original variable is used.
During the last 12 months, how often have you argued with either of your parents?	1=Not at all 2=Once 3=Twice 4=3-4 times 5=5 or more times	Original variable is used.
During the last 12 months, how often have you gotten into trouble with police because of something you did?	1=Not at all 2=Once 3=Twice 4=3-4 times 5=5 or more times	Dichotomous: 0=No use (code 1) 1=Any use (codes 2-5)

Construct	Response Scale	Coding
Interpersonal Aggression *During the last 12 months, how often have you...* •Hit an instructor or supervisor? •Gotten into serious fight? •Taken part in a fight where a group of your friends were against another group? •Hurt someone badly enough that they needed a doctor? •Used a weapon to get something from a person?	1=Not at all 2=Once 3=Twice 4=3-4 times 5=5 or more times	Average of valid items. If fewer than 3 items were valid, scale was coded as missing data.
Theft *During the last 12 months, how often have you...* •Taken something not belonging to you worth < $50? •Taken something not belonging to you worth > $50? •Taken something from a store without paying for it? •Taken a car that didn't belong to someone in your family without permission? •Taken part of a car without permission of the owner?	1=Not at all 2=Once 3=Twice 4=3-4 times 5=5 or more times	Average of valid items. If fewer than 3 items were valid, scale was coded as missing data.
General Victimization *During the last 12 months, how often...* •Has something of yours (worth < $50) been stolen? •Has something of yours (worth > $50) been stolen? •Has someone deliberately damaged your property (your car, clothing, etc.)? •Has someone injured you with a weapon (like a knife, gun, or club)?	1=Not at all 2=Once 3=Twice 4=3-4 times 5=5 or more times	Average of valid items. If fewer than 2 items were valid, scale was coded as missing data.

Construct	Response Scale	Coding
Self-Esteem		
•I take a positive attitude toward myself. •I feel I am a person of worth, on an equal plane with others. •I am able to do things as well as most other people. •On the whole, I'm satisfied with myself. •I feel I do not have much to be proud of. (reversed) •Sometimes I think that I am no good at all. (reversed) •I feel that I can't do anything right. (reversed) •I feel that my life is not very useful. (reversed)	1=Disagree 2=Mostly Disagree 3=Neither 4=Mostly Agree 5=Agree	Average of valid items. If fewer than 4 items were valid, scale was coded as missing data.

Appendix B
Those Who Work, but Not for Pay

Approximately 6.5% of all seniors reported working, but at the same time, reported that they did not earn any money from their job. It is likely that this group consisted of those who worked in family-operated businesses, who did volunteer work, or who were engaged in some type of bartering situation. Although this group did not comprise a large percentage of the total sample, the possibility that their working situation was quite different from those who worked for pay, (and from those who did not work), argued for considering them as a separate group in the analyses. The decision was made to consider them as a group without regard to their work intesity, as we had done for those who worked for pay, for two main reasons. First, it is unclear what exactly this group represents, and its broad heterogeneity with respect to working experience would make it difficult to draw conslusions about the impact of "uncompensated" work intesity. Second, because their numbers were relatively small to begin with, especially for single-form items (e.g., less than 400 without regard to work intensity), grouping them according to work intensity would have resulted in groups too small to warrant a full series of analyses.

Preliminary analyses reported in the table below indicate that the linear (r) and non-linear (eta) relationships between work intensity and the various outcomes were similar (though typically smaller) in this group of students than they were in the work-for-pay group (compare with Table 28). Given this evidence, it is unlikely that the inclusion of this group in the larger work-for-pay group would have had any major impact on the results. In general, however, it does appear that the difference between the corresponding r's and eta's is larger in this group than in the work-for-pay group, suggesting that the relationships are less linear in this group. Nevertheless, it is worth mentioning again that such interpretations are difficult because of concerns with group membership and with cell sizes.

	Males		Females	
Dependent Variable	r	Eta	r	Eta
Problem Behavior:				
1/2 pack or more cigarette use	.103	.125	.149	.180
Continuous[a]	.103	.121	.154	.171
Monthly alcohol use	-.013	.065	.013	.041
Continuous[a]	.079	.083	.031	.052
Heavy alcohol use in past 2 weeks	.034	.052	.031	.059
Continuous[a]	.063	.072	.043	.059
Mon.117thly marijuana use	.048	.070	.100	.111
Continuous[a]	.098	.117	.105	.122
Monthly cocaine use	.121	.128	.012	.052
Continuous[a]	.131	.140	.032	.069

	Males		Females	
Dependent Variable	r	Eta	r	Eta
Monthly amphetamine use	.067	.079	.057	.068
Continuous[a]	.071	.089	.066	.071
Interpersonal aggression	.203	.234	.064	.094
Theft	.090	.140	.154	.163
Trouble with Police	.051	.146	.034	.082
Continuous[a]	.087	.169	.083	.214
Arguing with parent	-.005	.100	-.029	.155
Victimization	.141	.164	.062	.156
Time Use:				
7+ hours of sleep	-.012	.072	-.182	.215
Eating breakfast	-.013	.128	.143	.159
Exercising vigorously	-.072	.091	-.127	.206
Days of school skipped	.078	.104	.113	.118
Evenings out	.017	.076	.016	.051
Evenings out on date	.040	.101	.041	.082
Subjective Experiences:				
Satisfaction with life	.021	.109	-.053	.152
Satisfaction with self	.106	.131	-.044	.104
Satisfaction with fun	.037	.138	-.005	.081
Satisfaction with leisure	-.058	.135	-.116	.154
Self-esteem	-.078	.155	-.115	.127

[a] Refers to statistics based on a continuous scaling of the given problem behavior index; dichotomous scaling was used in the corresponding MCAs, and, thus, are presented first for each given problem behavior index.

Appendix C
Standardized Factor Loadings for Patterns A and B by Gender

Factor	Item	Standardized Factor Loadings Males	Females
Pattern A:			
GPA	GPA	.95	.95
Hours Work/Week	Hours Work/Week	.95	.95
Pay/Week	Pay/Week	.95	.95
Cigarette Use	Cigarette Use	.93	.93
Alcohol Use	Alcohol Use	.86	.86
Heavy Drinking	Heavy Drinking	.80	.80
Marijuana	Marijuana	.89	.89
Cocaine	Cocaine	.85	.85
Pattern B:			
Early Drug Use[a]	Grade at 1st Cigarette Use	.64-.67	.70-.71
	Grade at 1st Daily Cigarette Use	.56-.60[b]	.63-.65[c]
	Grade at 1st Alcohol Use	.56-.60	.56-.58
	Grade at First Drunk	.68-.71[d]	.70-.72[e]
	Grade at 1st Marijuana Use	.80-.82	.80-.81
GPA	GPA	.95	.95
Hours Work/Week	Hours Work/Week	.95	.95
Pay/Week	Pay/Week	.95	.95
Cigarette Use	Cigarette Use	.93[f]	.93[g]
Alcohol Use	Alcohol Use	.86[h]	.86[i]
Heavy Drinking	Heavy Drinking	.80[j]	.80[k]
Marijuana	Marijuana	.89[l]	.89[m]
Cocaine	Cocaine	.85	.85

Note: Based on accepted models (refer to Figures 24-33); for single indicators (i.e., all but Early Drug Use items), corresponding value for unique variance fixed to a pre-determined error term (see text).

[a] Factor loadings vary according to given range, depending on given outcome substance use index.
[b] Correlation between corresponding unique variance and that for grade at 1st cigarette use = .07-.17
[c] Correlation between corresponding unique variance and that for grade at 1st cigarette use = .10-.12
[d] Correlation between corresponding unique variance and that for grade at 1st alcohol use = .49-.53
[e] Correlation between corresponding unique variance and that for grade at 1st alcohol use = .41-.46
[f] Correlation between corresponding unique variance and that for grade at 1st daily cigarette use = .53
[g] Correlation between corresponding unique variance and that for grade at 1st daily cigarette use = .44
[h] Correlation between corresponding unique variance and that for grade at 1st drunk = .22
[i] Correlation between corresponding unique variance and that for grade at 1st drunk = .28
[j] Correlation between corresponding unique variance and that for grade at 1st drunk = .20
[k] Correlation between corresponding unique variance and that for grade at 1st drunk = .19
[l] Correlation between corresponding unique variance and that for grade at 1st marijuana use = .29
[m] Correlation between corresponding unique variance and that for grade at 1st marijuana use = .29